

# Clinical Medicine

## A Monthly Postgraduate Course

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### Prof. Aldo Castellani

**A**LDO CASTELLANI was born in Florence, Italy, on September 8, 1876, his father being Ettore Castellani.

His early education was obtained in his native city and he was graduated from the University of Florence, as a Doctor of Medicine, with highest honors, in 1899. He then went to Bonn, Germany, to study under Professor Kruse; later going to the Lister Institute, London. While still a student in Florence he devised the "dilution method" of growing bacilli from blood. During his stay in Bonn he devised the "absorption method" for the determination of closely allied bacilli and for the diagnosis of "mixed infections."

In 1902, while at the London School of Tropical Medicine, he was selected by the British Foreign Office, at the recommendation of Sir Patrick Manson and Sir Ronald Ross, to go to Uganda to investigate sleeping sickness. There he found a *trypanosome* in the cerebral fluid of sleeping sickness patients and connected it with the etiology of the malady. His researches were confirmed and greatly elaborated by Sir David Bruce and Dr. David Nabarro.

In 1903 he was appointed professor of pathology, and a little later professor of tropical medicine and lecturer on dermatology at the Ceylon Medical School. He was also director of the Bacteriological Institute and Clinic for Tropical Diseases, and physician to the Seaman's Ward, General

Hospital, Colombo. He remained in Ceylon and held these appointments until 1915. During that period of time he carried out several investigations, found the microorganism of yaws, at that time the most important disease of Ceylon; described several new diseases and their causative organism (as broncho-spirochaetosis, new forms of bronchomycosis, endemic funiculitis, copra itch, etc.); prepared and used the mixed vaccines (TAB; TABC) which later on, with slight modifications, were adopted by all the Allied Armies.

In 1906 he married Miss Josephine Ambler Stead, and has one daughter.

In 1915 he accepted the professorship of Tropical Medicine at the Royal University of Naples, but after a very short time joined the Italian Army Medical Service, as a Lieut. Colonel, was sent to the British in the Balkans, and in 1917 was placed on the interallied Sanitary Commission with headquarters in Paris.

In 1918 Sir Patrick Manson asked him to join the staff of the London School of Tropical Medicine and he then resigned his Naples professorship and settled down in London. Later he accepted the directorship of Tropical Medicine in the Ross Institute. For services rendered during the World War, etc., he received the C. M. G. from the British Government, the Legion of Honor (Officer) from the French Government, the Italian Military Cross and the Grand Cross

of the Crown of Italy from the Italian Government, also various decorations from Serbia and Poland.

Since the War he has continued to do some research work in addition to teaching and doing consulting practice. For instance, he found a mycological method for the detection of various sugars and other carbon compounds; has found some new fungi, a new treatment for dermal leishmaniosis, etc. In all, his contributions to medical literature number some four hundred, and his *Manual of Tropical Medicine*, which he wrote jointly with Dr. Albert Chalmers, has reached the third edition and the fourth edition is now in preparation. It is recognized as the standard authority on this subject.

Early in 1926 he came to this country to organize and be the head of the School of Tropical Medicine at Tulane University, New Orleans, La., with the title, Professor of Tropical Medicine.

In April, 1926, at the annual meeting of the American Medical Association, at Dallas, Texas, he received the gold medal for his exhibit of tropical mycoses and the organisms which caused them.

Dr. Castellani is a man of splendid physique, great enthusiasm and much personal charm. Without his enormous fund of physical energy he could scarcely have accomplished the large and varied activities which he has to his credit. He is a notable and welcome addition to the medical profession of America.

The moment a man ceases to study he has reached the retiring age.—Prof. Alfred Stengel.

#### RECORDING PHYSICAL EXAMINATIONS

The physician who has had no experience or training in conducting a periodic health survey views the idea with the degree of mild dread which afflicts us when we have to undertake some unfamiliar procedure.

But physical inventories are here to stay—in fact, they are only just beginning—and we will be wise if we prepare ourselves, at once, to meet a demand which is sure to be more widespread and insistent with every year that passes.

Of course, the more we know about medicine in general and physical diagnosis in particular, the better we will succeed with this work, but no elaborate and expensive textbook need be purchased especially for this instruction. The American Medical Association has issued a small manual covering this subject which contains all essen-

tial information and is sold for a nominal sum. This manual has been distributed free to all members by several medical societies, including those of New York and Chicago, and it would be a good idea if every county society in the country would consider adopting the same wise and foresighted plan.

The *Boston Medical and Surgical Journal* for November 19, 1925, had a 20-page article covering the subject. In fact, one sees more and more reference to this service throughout the periodical medical literature.

In order that these examinations may prove of the greatest value, it is necessary that as full a history of the case as is possible should be obtained at the outset and set down in an orderly and systematic manner and in permanent form for future reference.

For the purpose of obtaining complete records of all the various factors which enter into a complete picture of all the mental and physical antecedents and present peculiarities of the individual, a number of interesting record blanks have been and are being devised. One rather unusual one was discussed on page 726 of the October number of *CLINICAL MEDICINE*. It is probable that *Medical Economics* would furnish interested physicians with the details—if you have mislaid or thrown away the number referred to.

Then there is the exhaustive "Preliminary Clinical History" blank, devised by Dr. J. Madison Taylor, of Philadelphia, and published and sold by the F. A. Davis Company, of the same city. This blank is to be filled out by the patient at his home, where he can consult all sources of information in regard to matters of which his knowledge is defective. The uses of such a history as this are not confined to the periodic health survey, but would be of immeasurable value in the study of any case of chronic disease.

The A.M.A. also publishes a blank form for recording such examinations. This form occupies both sides of a letter-size sheet and is very condensed and complete.

Any physician of average skill and experience who will procure and carefully study one of the manuals or articles mentioned and equip himself with proper blanks for recording his findings can soon put himself in a position to make an adequate examination and an intelligent study of the physical and mental status of any individual, and will thus be ranging himself along the line which medical progress is bound to take in the future—is taking even now.

Those who fail to prepare themselves to do this work need not complain, ten years

hence, that life is passing them by, because there are plenty of indications on every hand to show them the direction in which the procession is going to march.

The palest ink is better than the most retentive memory.—Chinese Proverb.

### PREScribing VACATIONS

The citizens of this and various other countries are coming, more and more, to realize the necessity for taking some respite from the grind of daily work, and this relief becomes more and more necessary the more strenuous and confining that work is.

A good many seem to feel that all that is necessary is to quit their usual occupations and spend a few weeks in tearing around as hard and as fast as they can. Certain others take their vacation sitting at the wheel of an automobile, in about the same position they sit at their desks, and getting about as much exercise. Of course, they do have the fresh air and the change of scene, and that helps some.

With the approach of the time when physicians will be called upon to supervise the entire physical activities of their patients, in order that they may live long and well, we had best begin to consider the matter of prescribing vacations to meet individual needs.

Nor is this a matter which is entirely in the future. Many of our patients are now taking vacations which are wholly unsuited to their particular needs and are suffering unpleasant and sometimes dangerous effects as a result. Mountain climbing, tennis, long trips into the rough and rugged wilds and things of that sort are delightful for those who are young, robust and muscular, but they are not the thing for elderly people, children and those who have some cardiac impairment. Matters like this should be carefully considered.

Sometimes it is rest that the vacationist needs rather than exercise, and sometimes it is a combination of the two in regular and alternating dosage. In other words, if a vacation is to do the vacationist the utmost possible good, it must be given the same amount of thoughtful consideration that the person would give to any of his other life activities, and the advice of a physician would frequently be very helpful—provided the physician had taken pains to look into this matter somewhat—and might even prove to be a life-saving precaution.

Granted that there is no physical reason why a man should not take any kind of a vacation he desires, it is a matter of common economy and efficiency for him to find out what kind of one will give him the most relaxation and refreshment in return for the time and money he expends.

In a little book, "The Psychology of Relaxation," G. T. W. Patrick develops the thesis that the occupations which rest the modern active business man most are those which go furthest back into the racial past. He says that the reason for the tremendous popularity of base-ball is that every spectator indulges, vicariously, in three absolutely primitive pursuits. Our very ancient ancestors depended for their sustenance and self-preservation upon their ability to run swiftly, throw a missile with force and accuracy and strike a well-directed and crushing blow with a club. In base-ball all three of these activities are brought into play, with the result that the folks in the bleachers revert, temporarily, to the stone age and return from this foray into the remote past, filled with "fresh veal and new zigor," to take up the hum-drum routine of civilized life.

In view of these suggestions it would seem that, for those who are physically able to do so, it would be well to spend those weeks of escape from the desk in fishing, boating, tramping in the wilds, or something of that sort.

Let us study up this matter a little so that we will be prepared to give our patients intelligent and helpful suggestions if they call upon us, or even volunteer them, in a tentative way, so as to show our interest and the extent of our information. Moreover, it will do us no harm if we put some of these ideas into practice ourselves and we may be thus enabled to make ourselves shining examples of the condition a man ought to be in and the way he ought to conduct himself.

Every unused or unanswered instinct becomes a source of uneasiness and keeps nagging at a man until he does something about it.—Albert J. Nock.

### THE DIAGNOSIS OF PULMONARY TUBERCULOSIS

There is a good deal of uncertainty in the minds of many practicing physicians as to just what signs and symptoms they have to find in a patient before they are justified in making a diagnosis of tuberculosis of the lungs.

There is a reasonable excuse for this lack of diagnostic clarity, because one might study a number of textbooks on diagnosis without finding a categorical statement as to the criteria upon which a finding of pulmonary tuberculosis might be based.

Now that the National Tuberculosis Association has published their little brochure on this subject there is no longer a reason why any physician should still have hazy ideas in this regard, for these people will send one of these booklets, free, to any physician who will direct a request to them at 370 Seventh Ave., New York City.

In this book is the direct statement that a diagnosis, in these cases, rests upon five points: (1) a history of hemoptysis of one dram or more without any other known cause; (2) a history of an otherwise unexplained pleurisy with effusion; (3) definite râles which persist for a week or more in the upper half of the chest; (4) definite evidence of parenchymal changes seen in the x-ray film, located usually in the upper half of the chest; (5) the demonstration of tubercle bacilli on two or more occasions.

The various suggestive physical findings, such as cough, hoarseness, loss of weight, fever, pulse rate, etc., are clearly and briefly outlined and their significance explained. Hilum tuberculosis is fully discussed; and so is tuberculous cervical lymphadenitis. There are some excellent suggestions as to how to handle the various classes of tuberculous patients.

Most of us have needed a book of this sort for some time, and every doctor in the country ought to send for a copy, carry it in his pocket and study it at odd moments until he has memorized its contents, and then keep it on his desk for ready reference.

Public health is the foundation upon which rests the happiness of the people and welfare of the state. Reform directed toward the advancement of the public health must ever take precedence over all others.—Disraeli.

#### RELATIVE VALUES

A wise mystic of the East has made the statement that one of the principal qualifications for progress is the acquirement of the faculty of discrimination—the power to distinguish, not only between the good and the bad, but between the important and the unimportant and between the more important and the less important.

If you stop to think about it you will find that all life is a study in comparative values and that the difference between the man who goes ahead and the man who stays be-

hind; between the man who is happy and the man who is unhappy; between the man who is called wise and the man who is called foolish depends upon the soundness of the judgment he uses in making his selections; that is, upon his power of discrimination.

There is no action that any of us performs, no matter how trivial it may be, but offers us at least two choices—we can do it or not do it—and our decision in the matter is not, as may appear on the surface, a question of luck or chance nor even of a decision of the moment. Whether or not I will get up at six o'clock tomorrow morning or take a second helping of meat at dinner or buy my wife a box of candy today has all been determined in advance, perhaps years ago, just as truly and certainly as the decision whether a man will rob a bank or corner the wheat market or commit a murder depends upon the way he has been thinking and acting for years.

I have ten dollars. Will I spend it for books? Will I buy my daughter some new shoes? Will I take my stenographer to dinner? or will I purchase a quart of Scotch from my bootlegger? Anyone who has known me for five or ten years will know the answer just as well before it happens as he would afterward. Whenever we spend a dollar we do so because we believe, for the time being, at least, that what we get for it will give us more pleasure than anything else for which we could spend it. Unfortunately, it is impulse rather than real consideration which generally dictates the manner of the spending. If we did more thinking before spending we would come nearer to getting the full worth of our money.

We are spending another commodity every day, the laying out of which is of vastly more importance than is the expenditure of our money. There are a good many people in the country who have enough money so that, if they find that what they have bought today is not worth buying, they can go out tomorrow and try again without counting the cost; but the richest man in the world, and the poorest, each have the spending of just twenty-four hours—no more and no less—every day, and no amount of money or political or social influence can procure one minute more for any man.

The faculty of discrimination is, therefore, of even more importance when it comes to laying out our time than it is in disbursing our money. What can we buy from life with this hour now in hand which will give us the largest returns in solid and enduring



satisfaction? That is one of the most vital questions which any of us has to answer. Many of our hours are mortgaged to duty, so that we have no latitude in deciding how we will spend them. We and our families must be fed, clothed and sheltered and a considerable part of our time has to be spent in procuring these things, but we all have minutes and hours which are our own, and the way we spend these will largely determine our future.

Nor are our discriminatory faculties wholly limited to the hours over which we have entire control. The hours of duty may be used to the best advantage or they may fall short of being so used. Remember the story of the three workmen, one of whom was merely cutting stone, the second was working for ten dollars a day, while the third was building a cathedral. Which are we doing? That is not an academic question but one which is of vital importance to every one of us, because anyone who knows the answer can tell, with astonishing accuracy, where we will be ten years hence.

Bearing in mind the power of habit, it is easy to see that the way we do our work or spend our time and money today will have an enormous influence in determining the way we will be doing these things a year or five years hence. That is the reason for the statement that even the trivial happenings of today were determined long ago, by the habit of mind and thought of the man to whom the things happen. Broadly and humanly speaking, that is the only predestination, but upon that basis it *works*, with a regularity and certainty which would be very surprising to many who have not given the matter much thought.

There is only one safe way to do our duties, and that is as if our boss—for we all have one, in one shape or another—were coming around at once to look over our work and see if it is satisfactory.

The ways of spending the time which is our own are, on the contrary, as various as the men who spend it. Nobody is going to check up on that *today*, but there is one to whom we will have to give an accounting of our stewardship, and that is the man we will be—or might have been—ten years hence. He it is who will view our labors with a cool and unprejudiced eye and say, "You made me what I am today, I hope you're satisfied."

Every moment of every day we are, consciously or unconsciously, making decisions. If we make them unconsciously we are in almost as bad a case as a man who is trying

to sail a ship without a rudder. If we fully recognize what we are doing we are more likely to make sound decisions and to get, for the money and the time which we have to spend, something which will prove to be a really profitable investment.

I cannot tell you how you ought to spend your time, nor can you tell me. No man can do that for another. All one can do is to point out the situation and earnestly urge that each one shall lay out a systematic plan of spending—a budget—and travel each day with some definite goal in view.

So it seems that the mystic is right, because the way in which we exercise the faculty of discrimination enables a thoughtful observer to tell, not only what we are today, but what we were years ago and what we will be years hence.

No faculty is developed without patient, unremitting, daily exercise and if we would gain a just appreciation of the relative values of all things—tangible and intangible—we cannot begin the development of that faculty too soon, for every day lost now means the positive and certain postponement of the time of our arrival at that position in the scheme of things which we would like to attain.

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We fear not the carriers of malaria and yellow fever, but thunder and the dark; we pity not the gifted youth debarred from education, but the beggar's bloody sore; we are less excited by a great injustice than by a little blood.—Prof. Thorndike.

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## HOW DO YOU LOOK TO YOURSELF?

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It was the Scottish bard, Robert Burns, who eloquently prayed that power might be given us to see ourselves as we appear to others, but, while that experience might sometimes be pleasant and inspiring, it seems probable that it would more often give a very decided jolt to our self-esteem; but, pleasant or unpleasant, it ought always to be profitable.

If Frank Billings, Charles Mayo, Hugh Young, Aldo Castellani or other celebrities in that class want to go around looking like a last year's bird's nest (they don't!), they can get away with it because they have a national and international reputation and theoretically it does not matter how they look; but, if you and I want to get on and make a success in life, we have to keep ourselves looking like respectable human beings, because, in spite of all moral, spiritual and ethical considerations, the opinion formed of us by those we meet is very largely determined by the way we look and act when they meet us.

It is a curious and an interesting fact that practically all of the famous men in the medical profession who could, theoretically, afford to be untidy in their dress and uncouth in their manners are among the most punctilious dressers and the most polished gentlemen in the country.

It would be the height of folly for a man to bedeck himself in gorgeous raiment far beyond his means; but even at that we have a suspicion that such a course might be preferable to that pursued by some of insulting the morning by appearing with unkempt hair, dirty collar and finger nails, baggy trousers, and tokens of yesterday's poached egg on the front of the vest.

Good clothes, by themselves, will not make a good man or a good doctor out of a scoundrel or a quack, but they will go a long way towards establishing that feeling of self-confidence and inner dignity which is essential to success in any line of work, and particularly in those callings which bring men into intimate and personal relations with their fellows.

It is perfectly possible for any man or woman who respects himself sufficiently to give the matter a reasonable amount of time and attention to be neat, well-groomed, and dressed becomingly and appropriately; and any man who does not respect himself sufficiently to do these things has no right to complain if other people fail to respect him.

He who makes chaff of himself the cows will eat.—  
Arabian Proverb.

### GLUCOSE

It is not so long ago (most of us can remember the time clearly) that glucose was considered only as a more or less harmful adulterant of cheap candy.

Some years since it was proved to be not only harmless but an inexpensive and nutritious food, and its domestic use has been popularized under the name of corn syrup; but its use in medicine goes back no further than 1912, when a method was discovered for making an accurate determination of the percentage of sugar in the blood, and its extensive and scientific employment awaited the discovery of insulin, By Banting, in 1922.

Chemically, glucose (otherwise known as *dextrose*) is a monosaccharide sugar, having the formula,  $C_6H_{12}O_6$ . It is colorless, odorless, neutral in reaction, soluble in water (but almost insoluble in alcohol and ether). It crystallizes readily and therefore is easily diffusible through animal mem-

branes by osmosis. It is widely distributed in nature, in honey, grapes and other sweet fruits, in certain roots and seeds, and in the animal body at all times, especially during the digestion of carbohydrates.

To understand its use in medicine one must briefly survey the mechanism of carbohydrate metabolism. We take into our bodies a wide variety of carbohydrate foods, including all the starches and various mono- and polysaccharide sugars, but no form of carbohydrate except glucose can be utilized by the body cells; hence, all the complicated energy foods which we eat must be changed into this simple sugar before they can do us any good.

Most of the glucose which is formed in the intestine is immediately used up in maintaining body heat or furnishing the energy for muscular movement and other forms of work. Whatever is not so utilized is changed into the complex organic substance known as *glycogen*, and is stored in the liver, muscles and other tissue cells. After such storage it cannot be used by the body until it is changed back again into glucose.

When the available supply of glucose in the body runs low, due to carbohydrate starvation, wasting diseases, pregnancy or other causes, the body begins to burn its own fats; and since fats can only be completely burned in the fire of carbohydrates, the products of incomplete fat metabolism, the ketone bodies (betaoxybutyric and diacetic acids), begin to appear in the blood, the carbon dioxide combining power of the body fluids decreases and we have a condition of ketosis, or "acidosis."

It is here that the importance of glucose appears, for it is the only known food substance which can be administered directly into the veins and can be immediately utilized by the heart muscle and other body tissues. But, before the tests for blood-sugar were perfected there was danger in such administration, because of the possibility of *glucose shock*, which is characterized by increased temperature, cyanosis, rapid and weak pulse and a sense of anxiety. These blood studies have permitted the standardization of the dosage of glucose so that it can now be safely given by those who are unable to avail themselves of such studies in all cases.

Even after this discovery the intravenous use of glucose was not widely practiced until the discovery of insulin, which is the direct physiological antagonist of glucose,

so that the two substances are mutually antidotal to each other.

The indications for the intravenous administration of glucose are decidedly varied but all depend upon its ability to furnish promptly utilizable carbohydrate to a body which needs it.

In an excellent article on this subject in the March, 1926, number of *Southern Medicine and Surgery*, Dr. Garnett Nelson, of Richmond, Va., suggests its employment in the acidosis of starvation; in pernicious vomiting of pregnancy; in poor surgical risks, prior to operation; in intoxication from split proteins, following extensive burns; in postoperative vomiting and acidosis; in surgery of the brain, where there is evidence to show that the giving of a hypertonic glucose solution will cause a marked shrinkage of the cranial contents within 10 or 15 minutes; and, on the same basis, such a solution will frequently relieve the agonizing headaches which accompany "benign arterial hypertension."

It is, of course, obvious that any condition in which prolonged vomiting occurs will rapidly lead to semi-starvation, so the use of glucose in such conditions is logical and reasonable.

In administering insulin to diabetics it is not particularly infrequent that an overdose is given, producing *insulin shock*, shown by sudden hunger, weakness, restlessness, pallor or flushing, rapid pulse, tremor, sweating, vomiting and diarrhea, vertigo, convulsions, collapse and sometimes death. All these symptoms can be immediately relieved by the prompt intravenous injection of glucose solution, or, failing this, by the eating of glucose, honey or even cane sugar.

There is considerable literature on the employment of glucose in the toxemias of pregnancy, in order to prevent eclampsia. One of the best articles, by Titus and Givens, appears in the *J. A. M. A.* for January 14, 1922. These authors feel sure that such toxemias are the result of carbohydrate insufficiency in the mother, and have convinced themselves that the employment of this substance produces highly gratifying results, not only in cases of pernicious vomiting, but also in *Chorea gravidarum*, pre-eclamptic toxemia and other forms of so-called acidosis.

The proper preparation, sterilization and neutralization of glucose solutions is a rather delicate process, and the extemporaneously prepared solutions do not keep

beyond 48 hours. (See *CLIN. MED.* for September, 1925, page 649, and the articles here quoted.) For this reason such solutions are practically available only to those who work in well-equipped hospitals.

Recently, however, several commercial houses are marketing satisfactory glucose solutions in ampules so that this valuable therapeutic resource is now available to all physicians, no matter where they may be practicing.

The employment of glucose injections, in cases where it is indicated, is earnestly recommended, especially to general practitioners, and we shall hope to receive numerous reports of the clinical experiences of those who are using it.

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What the best and wisest parent wants for his own child, that must the community want for all its children.—John Dewey.

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### BARBAROUS (?) MEXICO

We sometimes get the impression that our Sister Republic to the South is a land chiefly populated by thugs and hoodlums and principally remarkable for revolutions, *pulque*, and centipedes.

Regarding this matter, it might not be a bad idea to remember that the front pages of the Chicago papers are largely occupied in reporting the doings of a gang of residents of the suburb, Cicero, whose activities would put to the blush the wildest cavortings of Villa's bandits; but the fact that we hear a lot about these people does not prove that they are representative American citizens.

A notice appearing in the newspapers a few days ago states that marriage in Mexico City is now under the jurisdiction of the sanitary department and that no marriages will be celebrated unless both persons show medical certificates of good health. This order covers both civil and religious ceremonies, and all priests or judges who perform marriages without certificates of health will be punished severely.

There has been a good deal of talk from time to time about instituting some such measures as this in our own highly civilized and enlightened country, but up to the present time only one of our states—Oregon—has had the sound sanitary and sociologic judgment to put such measures into force.

As long as we are struggling with the "crime wave" which seems to be pretty well distributed over the country, and with marriage laws and regulations which are about as heterogeneous as possible and very frequently unsatisfactory, it might not do us

any particular harm to remember, when we are thinking about "barbarous" Mexico, that people who live in glass houses should undress in the dark.

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When the inhabitants of one nation are prejudiced against the people and institutions of others, they designate this prejudice patriotism.—Homer Lee.

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#### GOVERNMENT CONTROL OF NARCOTICS

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There is a bill now before Congress, known as the Kindred Bill, which, so far as we are able to ascertain at this time, provides that the government shall take over the manufacture and distribution of all narcotic drugs.

All physicians fully realize the importance of having *instantly available* at all times a supply of reliable narcotic drugs; and we are all acutely aware of the difficulties and inconveniences arising under the operation of the Harrison Law. This law was probably necessary, and so we make the best of it, but we are not keen for any more political tampering with the practice of medicine than we already have to put up with.

During the War, we all had ample experiences with the way things are run under

government control, and, again, we grinned and bore it because it seemed necessary and we wanted to be good sports.

If, however, in these times of peace, there is danger that the dilatory, unbusinesslike and politics-ridden system of government production will cast its blight upon some of the medicinal substances which are our main reliance in times of emergency, so that we shall be assured neither of a constant and adequate supply of these things nor of their quality and accuracy when we do get them, it is time we looked into the matter.

Better write to your Congressman and your Senators and ask them for information—also tell them what you think about it. They will never know if you don't tell them.

Incidentally, if there are various things the matter with the government, it is nobody's fault but yours and mine and that of people like us. It is *our* government, and if we are not sufficiently interested to take a hand in running it—voting at primaries and elections; keeping in touch with legislation and telling our representatives how we think and feel; and matters like that—we have no right to squeal if the fellows who *are* interested, and *know just what they want*, run things to suit themselves.

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**WE** ARE all of us willing enough to accept dead truths or blunt ones, which can be fitted harmlessly into spare niches, or shrouded and confined at once out of the way.

But a sapling truth with earth at its root and blossom on its branches; or a trenchant truth, that can cut its way through bars and sods, most men dislike the sight or entertainment of, if by any means, such guest or visions may be avoided.

—John Ruskin.

# Leading Articles

## The Closed Method of Thoracic Drainage in Acute Pleural Empyema

By LOUIS HANDELMAN, M.D., Chicago, Illinois

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**A**CUTE pleural empyema, although known to the ancients and spoken of by Hippocrates, still vitally concerns the internist, the surgeon and the general practitioner. Especially has this subject assumed great proportions since the World War, marked by the terrible epidemic of influenza and its frequent complication, acute pleural empyema. The frightful mortality that then attended conventional lines of treatment made medical men pause and hesitate. It dawned on the profession that, with a death rate reaching as high as thirty to seventy percent, there was something radically wrong with the established methods of procedure, and it became strikingly clear that rib resection with open drainage was not the best treatment for acute pleural empyema complicating a lobar or bronchopneumonia.

### Dangers of Open Drainage

Now that the shock of a heart-breaking experience is beginning to wear off, medical men are coming to realize the erroneous conceptions under which they labored. They did not realize, for example, that in the postinfluenzal pneumonias complicated by empyema, the exudate occurred early in the disease—at a time of maximum involvement of the lung and minimum production of adhesions. This condition was a most characteristic feature of lung infections due to the streptococcus hemolyticus. Practice in civil life had given a far different experience—a lung infection usually due to the pneumococcus, and, when complicated by empyema, this occurred when the height of the disease had passed and when plenty of adhesions had formed.

Another erroneous notion that prevailed at the time was that the two pleural cavities were independent of each other and that acute pulmonary collapse on one side would have no effect whatever upon the lung on the other side. Graham and Bell

showed by animal experiments and studies on human beings that “from the standpoint of pressure relations, the thorax may be considered as one cavity instead of two separate cavities. Any change in pressure in one pleural cavity will affect also the other one almost equally.” In other words, the mediastinal wall is not a rigid partition but one decidedly flexible.

The fear that an open wound in the chest would surely lead to fatal consequences was dissipated by these workers. They demonstrated that, when the vital capacity was normal (3700 cc.), an individual could withstand an opening in his chest equal to about eight square inches, and with greater vital capacities proportionately greater openings; but this only in healthy individuals. When a patient is suffering from pneumonia, is cyanotic, has labored breathing and is extremely toxic, such patient has lost, almost completely, his vital capacity and is barely able to get along with his tidal air, equivalent to about 500 cc. This point should be emphasized because of the great importance it bears in the operative treatment of empyema.

With these facts in mind, it becomes obvious why such a high mortality followed the routine treatment of pleural empyema during 1917 and 1918. The baneful effects of an open pneumothorax upon an acutely inflamed lung need not be stressed. This was especially emphasized during the epidemic period, since, in the vast majority of those cases, there were no adhesions, the mediastinal wall was not fixed and the pressure effects were manifested, not only on the diseased side but almost equally on the healthy side. Of course, one must not lose sight of the virulence of the epidemic. Nevertheless, it was a noteworthy fact that when the open method of treatment was replaced by the closed method, the mortality at Camp Lee dropped from over forty percent to less than five percent.



### The Diagnosis

Another feature that augments unfavorable results in the management of empyema is the difficulty in making an early diagnosis. Were the diagnosis as easy to make as is generally supposed, one would not so frequently run across cases of empyema necessitatis. Thus, J. F. Tees reports several cases, one four years old, breaking through the chest wall.

It is no easy matter to diagnose fluid in the presence of consolidation, but as Osler has put it with characteristic brevity, "In pneumonia, the doctor should be on the alert if the crisis is delayed or if the temperature rises after the crisis; if chills and sweats follow or if the cough changes to one of paroxysmal type of great intensity."

In children, particularly, is the medical man often put to task. Here, the crisis is less clearly defined, the physical signs difficult to interpret, and the roentgenographic findings often confusing. However, if one will be scrupulous in eliciting a history and will bear in mind the predominant features of the disease, he will less frequently find cause for sorrow and regret.

The suggestive signs are:

- 1.—A lagging or retraction of the affected side.
- 2.—Flatness on percussion—particularly a sense of resistance to direct percussion.
- 3.—Diminished tactile or vocal fremitus.
- 4.—Distant or absent breath sounds.

Following a careful physical examination, every patient should have a roentgen examination before any surgical treatment is instituted. Even aspiration should be deferred until the patient is fluoroscoped or plated (stereoscopically) as it sometimes happens that air is thus introduced and the picture becomes confused. If possible, the patient should be in the upright position, thereby showing the fluid level more clearly. At the same time, one may be enlightened as to the condition of the opposite side and occasionally be surprised by finding a pneumonia or an effusion. Further, the presence of air in the affected side may be disclosed, from which one may infer a communication with a bronchus. There may be revealed one or more encapsulated collections of pus or a lung abscess. It is of vital importance to interpret these findings correctly, bearing in mind the clinical course and physical examination, since the treatment varies greatly with the conditions revealed.

When the diagnosis is still in doubt, one should resort to the aspirating needle. Even

with thoracentesis, the diagnosis often remains clouded. It should be remembered that in streptococic empyema, the exudate appears early, as a thin layer between the lung and the chest wall, and so it frequently happens that the needle is introduced too far and instead of striking fluid, one strikes lung tissue. It is precisely for this reason that we find serious objection to *repeated aspiration*. It is perhaps because of this injury to the lung that pleural shock results. In the pneumococic type of empyema, the danger, of course, is not so great. One should, nevertheless, forbear from repeatedly and indiscriminately jabbing a needle into a chest because the first or second puncture happens to be a dry tap.

### The Methods of Treatment

The diagnosis having been established, the treatment or rather the mode of treatment must be determined. It is an accepted fact, dating back to the time of Hippocrates, that the prime and most essential factor in all methods of treatment of pleural empyemas is drainage. Shall a pleural cavity filled with pus be drained by repeated aspiration, by rib resection with the insertion of a rubber tube, or shall it be the closed method of drainage advocated many years ago and resurrected during the war?

Repeated aspiration (Potain method) is a half-hearted, make-shift procedure. It puts the patient through repeated painful experiences; it is not always productive of results and exposes the patient to some degree of danger. The cavity is not completely emptied, and pressure symptoms are only temporarily relieved. The pleura gradually thickens and pus pockets are likely to form. Furthermore, the same results can be accomplished far better and with less trouble by the closed method. After all, repeated aspiration is essentially nothing but the closed method interrupted at intervals of from eight to twenty-four hours.

Rib resection was the operation of choice before the outbreak of the Great War, and, even today, is the method adopted by many men. It was while this method was being used during the war that the mortality rate was so shockingly high. Other factors there were, indeed, besides rib resection that helped raise the death rate, but, even before the war, statistics were not too promising. Thus Aschner reports a series of 258 patients treated at the Mt. Sinai Hospital, of New York, between the years 1903 and 1913. Of these, 58 died, giving a mortality

rate of 23 percent, and 50 were not cured. In other words only 57 percent of the patients recovered; and this, at a time when we were not in the throes of a devastating epidemic.

There are, however, more weighty reasons than mere statistical evidence why this procedure should be used only when the closed method has failed. The operation of rib resection is certainly not so simple as the introduction of a trocar and catheter. Then, there is the possibility of injuring an intercostal vessel and producing a hemorrhage. Osteomyelitis in the exposed ends of the ribs is reported to have occurred in 4 percent of the cases studied by Schwartz, of New York. The danger of introducing foreign infection should never be forgotten and there is no doubt that this type of infection has a great deal to do with the chronicity of a large number of cases.

Another serious consideration is the loss of body heat resulting from an open pneumothorax. Sauerbruch has shown that in rabbits, as a result of an open pneumothorax, this loss of heat may reach 3.5°C. in 45 minutes.

One should also consider the discomfort and unpleasantness of always being bathed in pus; the expense connected with change in dressings; and, last but not least, the ever present possibility of a secondary radical operation with its scarring, deformity and lowered vital capacity. Whoever has seen a Delorme, a Schede or an Estlander operation will realize the seriousness of this particular phase of the subject. You not only deform these poor subjects but, by diminishing their vital capacity, you greatly reduce their chances of recovery, should they ever fall prey to some acute infectious disease.

#### Closed Drainage

Let us now see what the closed or Mozingo method has to offer us. To begin with, this is not a new procedure by any means. The fear of "sucking wounds" of the thorax prevailed as far back as the middle ages. It was Ambrose Paré who insisted that the first step in the treatment of a penetrating wound of the chest was to seal it. During the Napoleonic wars, the same fear was attributed to Larrey. Thus, this instinctive fear was borne down the ages and finally resulted in the adoption of closed drainage for empyema of the chest more than 50 years ago. Dieulafoy, Bowditch, and Potain used this method long before Bulau advocated it in 1891. Mozingo greatly simpli-

fied the technic and brought it up to its present standard.

The method is simplicity itself. It can be used in the earliest stage of acute empyema without any danger whatever, and without any fear of displacing the heart or compressing the lung and leaving it fixed in compression. By early evacuation of pus, this method prevents toxemia and a thickened pleura. There is certainly very little pain connected with the operation and no discomfort whatever after the operation. The patient does not "swim" in pus, the expense of dressings is nil and any intelligent person is capable of carrying out the postoperative treatment, so simple is it in nature. This operation may easily be done at home, the patient can get out of bed at an early date, no scars or deformities are left in its wake, and very seldom does it require a secondary operation. This method can be applied to open cases by converting them into closed ones, thus precluding the necessity for later mutilating operations.

From a statistical point of view, this method has shown itself to be far superior to that of repeated aspiration or rib resection with open drainage. Thus Mozingo reports his experience with 138 cases—45 acute and 93 chronic—with a mortality loss of less than 2 percent.

#### Technic

The diagnosis and the location of pus in the pleural cavity having been established, a small area of the thoracic wall is infiltrated with one-half percent novocaine (procaine) solution. In the majority of cases, this area lies in the seventh or eighth interspace, a little anterior to the angle of the scapula.

A small stab incision is made in the skin and the narrow blade carried down a short distance to make a track for the trocar, which is now introduced, and, by withdrawing the stilet, the operator can easily see by the escape of pus, whether he has reached the empyema cavity.

A rubber catheter, size F 18 to 22, is now threaded through the canula, after which the canula is removed, leaving the catheter in place. This is kept clamped to prevent ingress of air. A small portion of the end of the catheter is cut off and, with an artery forceps, is slipped down over the tube to the chest wall; through this cuff, a safety pin is passed, thus preventing slipping of the catheter, either in or out. A small split dressing is placed around the tube and fixed with adhesive strips.

The clamp is now released and 60 cc. of pus withdrawn with a graduated glass syringe. With another syringe, 20 cc. of a one-percent Dakin's solution is immediately injected and the tube clamped again. This should be repeated every two hours during the day and two or three times during the night. No more than 60 cc. of pus should be aspirated at any one time, and when the quantity falls below this amount, as much pus should be aspirated as possible. After each aspiration, Dakin's solution should be injected, the quantity being equivalent to one-third the amount of pus aspirated. At frequent intervals, the patient should be fluoroscoped, and smears should be studied for organisms.

When the smears become negative and the fluoroscope reveals a collapsed cavity,

the tube may be withdrawn and further treatment stopped.

Excellent aids to this treatment are the early use of Woulfe bottles, calisthenic exercises and, above all, a good nutritious diet and plenty of fresh air.

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## The Head Specialist and A Neurological Diagnosis

### A Review of Twenty-five Hundred Routine Examinations with Special Reference to the Eye, Ear, Nose and Throat as a Factor in Neurological Diagnosis

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THIS subject is taken up because it seems that it is a phase of head specialty work which has not been strongly enough emphasized. Indeed, the specialist in eye, ear, nose and throat has a most important part to play in a great many neurological diagnoses. It is felt that this aspect has not been emphasized enough in post-graduate teaching.

To show the importance of this specialty in relation to neurology, approximately twenty-five hundred cases presenting themselves for head examinations are herewith reviewed. These are cases which came under observation during eighteen consecutive months.

#### General Considerations

Certain remarks may be made which will apply to all the cases presented. The same routine examination was carried out in every case. Thus, if the chief complaint was an eye complaint, the vision, muscle balance, tension, condition of the media, and any pathology in the eye grounds were noted. A retinoscopy was done on every case. If necessary the fields were also recorded.

If the chief complaint was of the ear the following things were noted as a matter of routine: (1) canals; (2) drums; (3) whether or not the eustachian tubes were patulous (by catheterization); (4) hearing recorded by usual methods and tuning forks (C-C<sub>4</sub>); (5) the bone conduction, Rinne and Webber tests were recorded; (6) the caloric or turning test was done. In certain cases both were recorded; (7) an x-ray of the mastoids or smear and culture of a discharge when such was present were done when necessary.

Sometimes the chief complaint was a nasal condition. In such instances an x-ray of the sinuses and an examination with the nasopharyngoscope were a matter of routine. Further examinations such as washing out of the antra were carried out when necessary.

In cases where the chief complaint was of the throat, gross inspection alone was not relied upon. An examination was made of the larynx by indirect laryngoscopy. If this examination was not satisfactory, an examination was made with a Jackson spatula.

All patients, when the diagnosis was uncertain, were referred to the medical department for complete examination. The Wassermann test was a matter of routine on all important cases. Furthermore, in every obscure condition affecting the eye, ear, nose or throat the writer insisted upon a spinal fluid examination. As will be brought out later, this is of the utmost importance in many cases and one which the head specialist is prone to neglect. Of course, other laboratory work was done by the medical department when it was indicated.

These preliminary remarks are made to save monotonous reading. Furthermore, only those cases have been selected which have a distinct neurological aspect, and only interesting phases of each case will be presented.

In presenting these cases, some system should be followed. Therefore, those cases are first taken in which the eye symptomatology predominated.

#### Unequal Pupils

A study of one group of three patients is most instructive. Each of these patients presented the same symptom; viz., unequal pupils, which reacted to light and accommodation, but one pupil was larger than the other, although there was no irregularity. The blood Wassermann in each instance was negative. The spinal fluid of one patient, however, had an increase in cell count and a plus four Wassermann. Of course, the diagnosis in this case was at once evident.

It has been taught in medical schools and is now taught that the most common cause of unequal pupils is syphilis. This is quite correct, but it is not always due to this cause. The spinal fluid examination of the other two patients was completely negative and there were no stigmata of syphilis, either congenital or acquired. It was found that each of these other two patients did have a large refractive error with a consequent relaxation of the accommodation in one eye.

#### Ophthalmoplegias

Another interesting group of eye patients were the ophthalmoplegias, also three in number. None of them were complete. In each case only one eye was affected.

One of these was a young girl who has been under observation for two years with practically no change in the eye whatsoever. She had a slight exophthalmos, and involvement of the third, fourth and sixth nerves.

A moderate hyperopia was present but otherwise the local eye findings were entirely negative. Every possible examination was made and when the findings were summed up, there was only one plausible diagnosis and that was a superior poliomyelitis. No other symptoms were present then or have supervened since.

Of course, it must be remembered that myasthenia gravis may first manifest itself by an ophthalmoplegia. The writer well remembers a case in which he saw a young boy which was diagnosed by himself as epidemic encephalitis. A very excellent neurologist made the diagnosis of myasthenia gravis. This was evidently correct because three months later the boy was dead and in the interim had had no other symptoms typical of an encephalitis. Remissions, however, may occur in myasthenia gravis.

Another case of this group was diagnosed as multiple sclerosis. Of course, all the laboratory tests were negative. Locally, he had a slight refractive error, but the media were clear and the eye grounds negative. The pupils reacted to light and accommodation and there was no ptosis. There was marked involvement of the right internal rectus, the inferior rectus, and probably the inferior oblique. A lateral nystagmus was present, more marked to the left. He did not have the other two classical symptoms of a multiple sclerosis; i. e., scanning speech and intention tremor. He did, however, have a very significant weakness of the right arm and leg. And also typical is the fact that the patient, during the last year, has had a most remarkable and complete remission of symptoms. This is characteristic of the disease. Spinal fluid cell count showed no change whatsoever and the spinal Wassermann was, of course, negative. There was never an abnormal temperature.

On examining his hospital record, it is noted that he had a similar attack of weakness in the left arm and leg in 1917, from which he made a complete recovery. Another attack of like character was suffered by the patient in 1921. From this, also, he entirely recovered. In 1923 he had another attack with bladder symptoms, necessitating catheterization. Recovery followed as before. In none of these first three attacks did he have any eye symptoms.

His neurological tests were always negative, with the exception of some paresthesia and numbness along the course of the right ulnar nerve and the dorsum of the right

toe in the last attack. It is believed that this man will have another attack of one type or another. The diagnosis of the medical department was multiple sclerosis. In this the writer wholly concurred because it most logically explains his bizarre symptomatology and particularly his bladder symptoms, with the interpolation of periods of good health.

The third case of ophthalmoplegia occurred in an adult male who fell asleep while reading, leaving a very bright light shining in his eyes. In this case there was no involvement of the sixth or fourth nerves. His chief symptoms were ptosis of the lid and a diplopia. By careful muscle tests it could be shown that the paralysis probably involved the inferior oblique muscle of the affected side. Consequently, in view of other negative findings, a diagnosis was made of peripheral neuritis of the third nerve. This is borne out by the fact that in the last few months he has markedly improved.

Before leaving this group of cases, one case is mentioned of a ptosis of one lid in a boy. This entirely cleared up by properly correcting a very evident refractive error.

#### Epidemic Encephalitis

Epidemic encephalitis is a disease of utmost importance to the ophthalmologist. In fact, it is often he who first makes the diagnosis. In the series under consideration there were only two well-defined cases. Both showed a muscle imbalance with consequent diplopia, and both showed a moderate increase of the lymphocytes in the spinal fluid. One of these cases was in a boy and ran a very mild course with only a slight elevation in temperature. The other was in an adult male. This case ran a very typical and severe course. Six months after his acute attack he now has a bilateral, retrobulbar optic neuritis; a partial facial paralysis of one side; and much mental lethargy. This diagnosis has since been confirmed by a prominent neurologist of Richmond, Virginia.

The writer at one time or another has seen other cases of epidemic encephalitis. He never has seen, however, a case which did not show a muscle imbalance of one type or another, even in the early stages. Such a muscle error with its consequent diplopia is in no way an ophthalmoplegia. It varies from phoria to a tropia.

#### Retrobulbar Neuritis

Another group of interesting eye cases were those of retrobulbar neuritis. In this

class there were also three. All were bilateral. One occurred in an adult female following an attack of measles. She made a complete recovery although the vision in each eye was reduced to 20/100. A second case occurred in a man six months after an attack of epidemic encephalitis. This case has been referred to in a previous paragraph. The third case was evidently of sphenoidal origin, as the woman completely recovered following a bilateral sphenoid operation. The involvement of both eyes was not simultaneous. The vision of the right failed first. Two months later the left eye suffered a marked diminution in vision. Each sphenoid was opened as soon as a retrobulbar neuritis was demonstrated.

As pointed out in the previous paragraph, there was prompt recovery of vision and the fields gradually returned to normal following each operation. However, several months following her second operation, she suddenly developed a diplopia due to a partial paralysis of the right external rectus muscle. For this no explanation has ever been found. She gradually recovered the use of the muscle. She had two negative blood and two negative spinal fluid Wassermann tests. The spinal fluid cell count was never altered. Her blood count was normal. A stereoscopic x-ray of the chest was negative. The physical examination was negative.

A bilateral involvement suggests a possible tuberculosis of the optic chiasm. Therefore, a complete course of old tuberculin was given, the last dose being 10 mgm. There was no alteration of the local eye symptoms nor a general systemic reaction. In view of these findings, the diagnosis is still in doubt, as she never had a frank suppuration of either sphenoid sinus. As a last thought it is added that her tonsils were removed and her teeth received the proper care when she first came under observation.

Two cases in the series under consideration might be mistaken for retrobulbar neuritis; at any rate they are worthy of note. Both were unilateral. One patient was an old man who had what was very evidently an optic atrophy due to a sclerosis of the nutrient vessels of the nerve, as he had a generalized high-grade arteriosclerosis. This diagnosis was later confirmed by Dr. De-Schweintz of Philadelphia. The other case was an elderly woman who also had symptoms of widespread arteriosclerosis with hypertension. In both of these cases the



loss of vision in the affected eye was complete, with the exception of light perception. The details of these examinations are not given because it is merely the intention of this paper to review the diagnoses in these cases which are of neurological interest.

In this connection, one case of hysteria came under observation in which there was a contraction of the fields. This very often happens.

The last eye case mentioned is one which has been under observation for nearly two years. He is a man in middle life with a bilateral optic neuritis, as indicated by concentric contraction of the visual fields. The nasal side of each nerve is indistinct. There has appeared, within the last few months, a choking of the left nerve head of one diopter. Otherwise there is no eye pathology.

This patient has been thoroughly studied from every possible angle. All serological tests, both blood and spinal fluid have been negative. When first seen, he had definite nystagmus and weakness of one arm and leg. The caloric reactions were atypical. He had also a definite ataxia, cerebellar in type. The Romberg sign was present. He had then, and still has, periodic attacks of nausea and vomiting with terrific headaches. In view of the above findings, the patient was sent to the service of Dr. Charles Frazier, of Philadelphia, where the diagnosis was held in abeyance due to a remarkable remission of symptoms. The original diagnosis of the writer was cerebellar tumor, right.

The patient has gone more or less down hill. However, he still has remissions, at which times he feels comparatively well. Such a course is in contradistinction to the usual course of brain tumors which are, as a rule, progressive. The diagnosis of tumor does not now seem so certain, but it is still felt that he has some intracranial pathology. Time alone will clear the diagnosis.

#### Ear Cases

Next will be taken up the ear cases. They present some interesting patients.

The writer recently reported nine cases of lesions of the eighth nerve due to *tobacco*. These have been covered in detail in a previous paper and hence only passing mention will be made of them. Suffice it to say here that the chewing of tobacco very frequently produces lesions of both the cochlear and vestibular branches. The lesions of the latter branch are of particular importance because of the production of vertigo.

It is well to emphasize here that the differential diagnosis of vertigo is really a problem of the aurist. Jones has made an excellent classification stating that any case may be put in one of five classes: (1) middle ear disease; (2) intracranial pathology; (3) ocular defects; (4) Cardiovascular disease; (5) Toxemia from any organ or focus.

By the proper application of the vestibular tests, and thorough study of the ear as a whole, these cases can be properly grouped. With such grouping comes intelligent advice.

A doctor, after study of a case, should always be able to give an opinion. "Pussy-footing" never impresses the patient favorably. Consider the following case, which is one of those under consideration:

A man received a severe head injury, by reason of which he was unconscious for forty-eight hours. After regaining consciousness he developed a right facial paralysis and was sent to the hospital for an opinion because of bleeding from the right ear. An examination disclosed a recently ruptured drum, no discharge and very little impairment of hearing. Furthermore, the turning tests showed vestibular conduction on both sides to be normal.

With such normality of both vestibular and cochlear branches on the affected side, there was certainly no lesion of the eighth nerve. This nerve is very intimately related to the seventh nerve in the internal auditory canal and near the brain stem. This is a very important relationship and one which is commonly overlooked. Consequently, if intracranial pathology was causing the paralysis of the seventh nerve, it would, in all probability, affect also the eighth. This latter nerve, however, was normal. Therefore, a diagnosis of peripheral neuritis of the right facial nerve, due to trauma, was made and an opinion was given that the patient would probably recover completely. This prognosis has been sustained by the outcome.

#### Cinchonism

Another ear case is very worthy of note. He was a young man referred for treatment because of a supposed acute eustachian catarrh complicating a recent acute coryza. He was found to have a good deal of residual rhino-pharyngitis. However, the ear tests showed a high-grade deafness and were suggestive of marked inner ear involvement. The turning tests showed much impairment of vestibular conduction.

The patient gave a history of having previously heard as well as anybody. Conversation brought out the information that his home town doctor had given him large doses of quinine. Unquestionably this was a lesion of the eighth nerve, involving both cochlear and vestibular branches, and the pathology was very probably due to the quinine as this drug is notorious for its selective action for the second and eighth nerves.

The diagnosis was further strengthened by the quick onset of the inner ear involvement with no previous history whatsoever of ear trouble. Another argument in favor of the diagnosis is that he very markedly improved in the few weeks immediately following the stopping of the drug. An attempt was made at a later date to get this patient back for further examination, but he had left this section of the state.

Another ear case recently came under observation with high-grade inner ear involvement which was bilateral. This occurred in connection with a generalized arteriosclerosis and unquestionably represented a degeneration of the neuro-epithelium due to fibrosis of the capillaries.

#### Throat Cases

In taking up the cases where a throat affection was the chief complaint, there is only one case of definite neurological interest. This was a case of hysterical aphonia. A laryngeal application of 25% argyrol gave an instant return of voice which was truly remarkable. There was no pathological change whatsoever in the larynx. Her general medical examination was entirely negative. She was a highly neurotic woman and consequently the very type of patient in which one would expect to see such a phenomenon.

#### Nasal Cases

Among the nasal cases, the most interesting from a neurological standpoint are those presenting a neurosis of *Meckel's ganglion*. There were five such cases. All these patients presented the same symptom; viz., pain in one ear. An examination of the ear in every case was negative. Coincidence of the ganglion of the affected side, with adrenalin and flake cocaine, relieved the pain.

When the cause of the pain cannot be found in the ear there are two common external causes. These are an impacted molar tooth and a so-called neurosis of the sphenopalatine ganglion. The former should always be ruled out by a proper x-ray. The

latter phrase applies to pain in the ear, sometimes accompanied by "lower half headache" with no ear or nasal pathology. Cases have been described where the pain has even been referred into the neck and the shoulder.

However, the word neurosis should only be used where there is no demonstrable nasal abnormality. Thus, in one case of referred pain in the ear, relieved by cocaineization of the ganglion, the patient had a frank and chronic empyema of the antrum of the affected side. Operation upon this antrum gave her permanent relief.

In the other cases, however, the most painstaking examination revealed no pathology of the sinuses or the ethmoids. The pain was so severe in one of these cases that the patient was referred for a mastoid operation. Of course, she was given complete relief without operation.

The details of the above cases are omitted because such cases have been covered in the literature. Much has been written, particularly by Sluder.

Intranasal conditions will give varying pains and headaches. These, too, have been fully covered in current articles and only passing mention is made of them. The cases under consideration contain a number of sinuses and ethmoids which came to operation but the symptomatology in no case was so unusual, neurologically, as to deserve special mention.

In the cases studied are three of hyperesthetic rhinitis. This is really a neurological condition inasmuch as it is an abnormal sensitiveness of the nasal mucosa. Such patients have a blocked or congested nasal passage on the slightest nasal irritation, even a slight change of temperature. Sonnenschein and Pearlman have recently reported some of these cases which have been treated with calcium and parathyroid extract. This therapy has recently been adopted in selected cases but results so far have been indefinite. Furthermore, the number of cases is too small to warrant any conclusions.

#### Discussion

From the standpoint of diagnosis the eye is certainly one of the most important organs in the body. It will give a variety of information as to general systemic conditions.

For information about such conditions medical men have for a long time referred to the eye grounds. Much additional information of a neurological nature is often

furnished by a disturbance in the innervation of the eye. Therefore, any case of ophthalmoplegia, partial or complete, should be studied with the utmost care.

Many times the ophthalmologist is the first man to be consulted. In such instances responsibility rests on him for complete study. Often the eye symptoms are indicative of much more serious trouble than merely local condition. Particularly should encephalitis, superior polioencephalitis, multiple sclerosis, and myasthenia gravis be borne in mind.

As shown by the cases just discussed, the ear will also often furnish much valuable neurological information. Time should always be taken in any suspected inner ear involvement or intracranial lesion to do the calorific or turning tests. This will many times aid materially in a diagnosis. If the condition is entirely limited to the ear, careful tests will at least disclose the nature of the involvement.

The writer has long felt that the diagnosis of chronic catarrhal deafness is much abused. Many of these cases are either a mixed deafness or purely an inner ear involvement. Time should always be taken to make a clean-cut diagnosis.

In comparison to the eye and ear, from a neurologic standpoint, the nose is not so important a factor in general diagnosis. Often, however, obscure headaches and neuralgias can be relieved or benefited by the demonstration and proper treatment of paranasal sinus disease. When pain in the ear is not explained by local conditions the nose should always be examined. It is a simple matter to apply cocaine to the middle meatus. If the pain is relieved, the diagnosis is obvious. It may or may not be a true neurosis of Meckel's ganglia. Further examination of the nose will settle the question.

The throat is of even less importance than the nose so far as giving neurological information is concerned. It may, at times, give much valuable information in disturbance of the ninth and tenth nerves such as occurs in a bulbar or pseudobulbar palsy. An examination of the larynx sometimes gives valuable information as to involvement of the recurrent laryngeal nerve which occurs in certain thyroid conditions, either preoperative or postoperative.

### Conclusion

The cases reviewed have been selected from twenty-five hundred consecutive examinations. Of these cases, more than one percent (35) were distinct neurological entities. A definite diagnosis was made in each of these thirty-five cases, with the exception of two. With respect to these latter two, the exact nature of the trouble is yet to be determined.

Of the eye cases, only three were strictly local conditions. The manifestations in the other patients all reflected some general systemic alteration. Thus there were represented the following diseases: measles, one; syphilis, one; multiple sclerosis, one; epidemic encephalitis, two; arteriosclerosis, two; hysteria, one; chronic, superior polioencephalitis, one.

The ear cases discussed all reflect some cause outside of the ear. There was one case of peripheral facial paralysis, due to trauma over the mastoid cortex; another case showed extreme inner ear involvement due to the ingestion of quinine; a third case of inner ear involvement was in connection with a generalized arteriosclerosis. The cases of eighth nerve involvement due to nicotine represent, in reality, one of the end results of a toxemia. They are important because of the frequent occurrence of vertigo. A few other cases of toxic disturbance of the kinetic-static labyrinth, of indefinite origin, have come under observation during the same period of time. These have not been discussed, however, due to uncertain etiology.

The nose and throat gave nine cases of neurological interest. These may be enumerated as follows: neurosis of Meckel's ganglion, five; hyperesthetic rhinitis, three; and one case hysterical aphonia.

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# The Early History of Medicine West of the Alleghanies\*

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IT IS perhaps unknown by a large percentage of the members of the medical profession that the history of medicine in the West had its beginning at Transylvania.

The state of Virginia, in 1780, when "Ken-tuck-ee," as this country was called, was only a little-explored portion of that state, placed 8,000 acres of escheated lands within that county in the hands of thirteen trustees, "For the purposes of a public school or seminary of learning that might, at a future day, be a valuable fund of maintenance and education of youth; it being the interest of this commonwealth always to promote and encourage every design which might tend to the improvement of the mind and the diffusion of knowledge, even amongst the most remote citizens, whose situation a barbarous neighborhood and a savage intercourse might otherwise render unfriendly to science." Three years thereafter, by a new amendatory act, the general assembly reendowed this "public school" with 12,000 more acres of escheated lands and gave it all the privileges, powers and immunities of "any college or university in the state," under the name of *Transylvania Seminary*.

## Transylvania University

This was the first university in this section of the country, and early in 1799 the first attempt was made to organize a school of medicine. The name was changed to Transylvania University and the medical department was organized with Dr. Samuel Brown as professor of Chemistry, Anatomy and Surgery and Dr. Frederick Ridgely as professor of *Materia Medica*, Midwifery and the Practice of Physic. Dr. Brown qualified as professor in October, 1799 and Dr. Ridgely the following November.

Immediately the Board authorized Dr. Brown to import books and other means of instruction to the amount of \$500.00, which in that day was a considerable sum, for the use of the medical professors. The first degree of Doctor of Medicine was conferred upon John Dawson McCullough, of Lexington, Ky.

Thus we have our beginning of medical science west of the Alleghanies, having as

its birthplace, Lexington, Ky., and sponsored by men of world-wide reputation and renown, whose names are indelibly engraved upon the scroll of time and need no word of praise in this day to enhance their value. The real contributions to medical science made by these men, as well as by the institution of which they were a part, cannot be estimated, and what few writings there were are now out of print. Working, as they did, in an age without laboratories or much of any other kind of equipment, they acquired a keen insight and diagnostic acumen, which, since the advent of our scientific equipment, laboratories, etc., bids fair to become a lost art. Their vision of medical science and its achievements was but a promise of what we have today.

In 1819 the medical department was again reorganized and enlarged and again a purchase of books and equipment was made, this time from abroad. Dr. Charles Caldwell, was sent to London and Paris with \$17,000.00 to purchase equipment, and in his biography he tells us that the time of his arrival in Paris was "uncommonly propitious," because the ravages and destruction of the French Revolution had not passed away and for this reason he was able to get books which otherwise he would have been powerless to secure. He adds, "This explains the decided superiority of the Lexington Medical Library over any other in the West and South and probably in the whole United States, not excepting that of the mother school of medicine, the University of Pennsylvania."

A second foreign purchase was made in 1839, when Dr. Robert M. Peter and Dr. James Bush were sent abroad with \$11,000.00 to purchase books and equipment. On the Transylvania shelves today are 8,000 volumes of this early library as well as bound volumes of numerous foreign journals and of the student theses up to 1859, when the school closed upon the outbreak of the War between the States.

Dr. Robert M. Peter, in his biography of Dr. Samuel Brown, the first professor of Chemistry in Transylvania Medical College, says, "To him we are indebted for the first introduction of the prophylactic use of the cowpox in the west. As early as 1802, he had vaccinated upwards of 500 persons,

\*In the preparation of this paper I have referred to "Medical Pioneers of Kentucky" by Dr. J. N. McCormack, and to Dr. Irvin Abell's address before the Southern Surgical Association, Dec. 16, 1925.

while in New York and Philadelphia physicians were only just making their first experimental attempts. The virus he used was taken from its original source, the teats of the cow, and used in Lexington even before Jenner, the discoverer of the vaccine, could gain the confidence of his own people in France."



Dr. Benjamin Winslow Dudley

The names and achievements of this first medical college in the West, Transylvania Medical College, are too well known to need more than brief mention. Dr. B. W. Dudley was longest associated with the college, his years covering the period from 1809 to 1858. He was an alumnus of Transylvania, a graduate of Pennsylvania University, later studying his chosen profession in London and Paris, and when the position of Surgeon General in Napoleon's army was resigned by Baron Larry, it was offered to Dr. Dudley. He was especially famed for his operation of lithotomy and for his work on the eye and cranium. He was the acknowledged leader of American lithotomists and out of 225 cases lost only six. His success with this operation was so great that in England he was declared to be the lithotomist of the Nineteenth Century.

#### Dr. Ephraim McDowell

Dr. Ephraim McDowell, who was born in Virginia of Scottish descent, and came to Kentucky to practice, stands out in the history of early American medicine as the first surgeon west of Philadelphia. He began the practice of medicine in 1795 and soon persons were coming to him from all the neighboring states, while he frequently made horseback trips of hundreds of miles, to visit those who were unable to come to him. So far as is known, he was in the habit of performing every surgical operation then known to science, and we have good reasons to believe that he extirpated the parotid gland successfully long before McClellan or any other American surgeon had attempted it. Indeed there was scarcely any operation, from a simple amputation to a tracheotomy, which Dr. McDowell was not called upon to perform if he was accessible.

It was in the winter of 1809, when he had been practicing for fourteen years, that he was sent for to see Mrs. Crawford, a resident of Green County, who was thought by her doctors to have gone long beyond her time in pregnancy, or be the subject of extra-uterine fetation. Dr. McDowell found her trouble to be an ovarian tumor, which was rapidly hastening to a fatal termination, and it was at this time that he performed his celebrated first *ovariotomy*. To quote Dr. Gross' graphic description, "After a most thorough and critical examination, Dr. McDowell informed his patient, a woman of unusual courage and strength of mind, that the only chance of relief was the excision of the diseased mass. He explained to her with great clearness and fidelity the nature and hazard of the operation; he told her that he had never performed it, but that he was ready if she were willing, to undertake it, and risk his reputation upon the issue, adding that it was an experiment, but one worthy of trial. Mrs. Crawford listened to the surgeon with great patience and coolness and, at the close of the interview, promptly assured him that she was not only willing but ready to submit to his decision, asserting that any mode of death, suicide excepted, was preferable to the ceaseless agony which she was enduring, and that she would hazard anything that held out even the most remote hope of relief."

The result of this operation has long been known to the profession, Mrs. Crawford being the first one to submit to *ovariotomy* of whom we have any knowledge.



She was 47 at the time of the operation and died on March 30, 1841, aged 78 years.

How many times he performed this operation is not now definitely known, but certain it is that he was fonder of the scalpel than of the pen, for he seemed to have a natural antipathy to writing. He never appeared to assume that there was any difference between the plane of his vocation and that of the humblest unlettered artisan, and even his bitterest enemies never once accused him of the slightest degree of demagoguery.

By a gentleman of keen perception, yet living, whose father's family physician he was, it is told, that never was there a man whose life was freer from the acts of the charlatan, or more entirely void of all petty "tricks of trade," which all-too-frequently disgrace the medical profession. While in the sick-room he was fond of gossiping about local matters and events of the day, but he refrained from discussing things medical, or any of the affairs of his rivals, with some of whom he was known to be on anything but good terms. While in daily competition with certain members of the profession whose chief strength was in the application of such arts, they and their artifices were held in supreme contempt by him.

#### McDowell as a Physician

From what we learn, one of the constant endeavors of these gentlemen, who knew that they never could approach McDowell by fair competition, was to try to train the community to believe that there was a sort of essential incompatibility between surgery and medicine, and that because he was infinitely their superior in surgical knowledge and manual dexterity, by just so much was he their inferior in all the intricacies of the practice of medicine, whose arcana were not so evident to the public as were the more spectacular works of the surgeon. As they were in the habit of putting it, while he was a bold surgeon he was a poor "fever doctor." So far from this being the case, however, he kept abreast of the time in medicine, reading all that was new on the subject, and was probably really as far in advance of his competitors in physic as in surgery. Certainly we know that, in the treatment of fever, he was, in some respects, ahead of his time, though at variance with the accepted doctrines of his day and the prevailing custom of the physicians of his section.

At that period it was customary to give more or less mercury in the progress of

every fever, and after a dose of calomel or blue mass, to allow the patient to drink cold water was thought to be recklessly dangerous. The standard of treatment of the country was to let the patient have no drink but what was warmed, and this usually consisted of water in which a piece of burned bread-crust or warm toast had been soaked. Contrary to this practice, Dr. McDowell used to tell his patients that there was no danger in cold water while the skin was hot, and while such was the case, he allowed them to use it freely. It is told by the brother of a patient that the family was very anxious while obeying orders of the doctor, who directed that the fever patient be laid on the floor, naked, and bucketful after bucketful of water poured over him, to his great relief and ultimate recovery.

In medicine he looked on Sydenham and Cullen as the master minds and set their works on practice above all others. He was an enemy to any system of overdrugging, then so common, and believed that, as then given by the mass of the profession, without discrimination, drugs were producing, in the aggregate, more harm than good.

He was an accomplished anatomist and, every winter, in conjunction with his office students, of whom he usually had at least two or three, used to dissect, in the upper story of an old-fashioned building which had formerly been the county jail, and in time his office had quite a number of anatomical preparations, the work of his own hands.

After having determined upon the performance of any capital operation, his custom was to thoroughly drill his students who were to assist him beforehand, until each was perfect in the part he was to perform. Not only this but he compelled each one to give him a sufficient history of the nature of the difficulty requiring the operation; the anatomy of the parts involved; the tissues to be divided; and then to rehearse the different steps of the operation itself.

As an operator, it was the invariable opinion of all competent judges that, for coolness and dexterity, they had never seen his equal. From the moment he took the knife in his hand, preparatory to operating, he seemed to become enthused, and looked to the bystanders like quite a different man. Such a record spells genius and enough of his work lives after him to secure immortality to his name. He was virtuous, clean in body and mind, and his noble character

stands forever as the highest testimonial to culture and to the glory of medicine.

#### Dr. Charles Caldwell

Dr. Charles Caldwell, another of the early medical pioneers, born in North Carolina, graduated from the University of Pennsylvania, came to Kentucky during the early days of its Medical History and was, for a number of years, a professor in the first medical school west of the Alleghanies, Transylvania University.

In 1814 he held the Chair of Natural History in the University of Pennsylvania and while in this position he edited "Cullen's Practice of Physic." He was a pioneer in the teaching of clinical medicine in America and perhaps the creator of that branch of pedagogy, for in 1814 we find him delivering a course of clinical lectures in the Philadelphia Alms House, afterwards known as the Blockley Hospital. This was, no doubt, the place in which the yellow fever epidemic of 1793 made such a fearful havoc and which became historical in the classic lectures of Prof. T. S. Bell.

In 1819 Dr. Caldwell came to Lexington, filling the Chair of Medicine and Clinical Practice in the famous Transylvania Medical School, and in 1820 he made a tour of Europe in its interest. He was connected with this University for 18 years, during which time he was the friend and physician of Henry Clay, who in his great speech on the Poindexter Resolution, in the United States Senate, humorously referred to his friend and physician, saying, "According to the doctrines of phrenology, which have just sprung up, it is claimed that the leading passions and characteristics of man are developed in his physical conformation, and chiefly in the structure of his head. The founders of this teaching, being dead, I regret that they cannot examine the head of our illustrious Chief Magistrate, but, if it could be examined by Dr. Caldwell, I am persuaded he would find the organ of destructiveness prominently developed."

#### Yandell, Brashear and Peter

Another of our early outstanding medical men and great teachers in the West was Dr. Lunsford P. Yandell, Sr., who was, for a number of years, connected with the University of Medicine in Lexington and later went to Louisville, Ky., to help in the foundation of medicine there. While he resided in Lexington he was sole editor of the *Transylvania Journal of Medicine*, to which he contributed many able papers. After

going to Louisville he was editor of the *Western Journal of Medicine and Surgery* and contributed much to the medical literature of his day.

In 1806 the earliest original and successful surgical work of any magnitude—an amputation at the hip-joint—was done in Kentucky by one of her own sons, Dr. Walter Brashear. The undertaking was made necessary because of an extensive fracture of the thigh with great laceration of the soft parts, and was the first of the kind, not only in the United States but in the world. The patient was a mulatto boy, seventeen years of age, a slave at St. Joseph's College. It was in August, at Bardstown, Ky., and Dr. Brashear was assisted by Dr. Burr Harrison and Dr. John Goodtell.

The operation which was completely successful, was performed in two steps, the first consisting in amputating the thigh through its middle third in the usual way, and in tying all bleeding vessels. The second step consisted of a long incision of the outside of the limb, exposing the remainder of the bone, which, being freed from its muscular attachments, was then disarticulated at its socket.

Whether or not Dr. Brashear had ever read an account of what he accomplished, or even heard of the operation, he was the first to do it in the United States and the first to do the real thing successfully in the whole world.

Dr. Robert Peter, a very distinguished analytical chemist was also a member of the faculty of Transylvania Medical University from 1833 to the time of its removal to Louisville.

Time will not permit me to even mention all of our noted men in the early history of medicine in the West, and we cannot, like our English cousins, go back along the pathway and revere our medical colleges for their age. We can, however, revere our medical schools, and especially Transylvania University, as the first one West of the Alleghanies, which, by the aid of its founders, prepared our younger physicians to cope with the diseases that afflicted our people.

We cannot forget that it was the untiring and conscientious effort of these early pioneers that made our medical progress possible and we owe it to their memory to keep their vast treasures they have left to us intact and to be inspired by them to greater effort in behalf of medical science.

# Syphilis

By ROBERT EMMET JAMESON, M.D., Davenport, Iowa

**E**HRlich's dream and one great desire was to discover a remedy which, with one intravenous injection, would destroy the germs causing syphilis, and cure the disease.

When Ehrlich discovered salvarsan he hoped to give to the world such a remedy. He had demonstrated that it was possible to kill the spirillum which caused recurrent fever. It was known that this organism lived, grew and multiplied in the blood stream. Having successfully killed the spirillum of recurrent fever, it was believed that the germ causing syphilis could also be destroyed and the disease cured.

It is possible, in some cases, to kill the germs of syphilis and cure the disease with intravenous injections of arsphenamine, when the disease is diagnosed within three weeks after the date of infection. Since the discovery of the spirochetes, it has been learned that after three weeks, in some patients, these organisms leave the blood stream and invade one or more of the tissues of the body, all tissues being subject to invasion. After the spirochetes have left the blood stream and invaded the tissues selected by them in that particular patient, they become embedded or encapsulated in the tissues.

It is now known that the spirochetes may be destroyed in the blood stream, as a rule, before they are destroyed in the tissues, and blood Wassermann tests will, in many cases, repeatedly be reported negative when the patient has active lesions and pronounced clinical evidence of syphilis. Postmortem findings, in many cases, have demonstrated the same thing repeatedly and it is now an accepted fact among syphilologists, this being the very reason why they have been and are urging their patients to take treatment for a period of three years with frequent Wassermann tests to determine its results.

Eye examinations, by ophthalmologists, and, if there is bone or visceral involvement, roentgenographic examinations will give valuable aid in diagnosis, providing the findings are correctly interpreted.

## A Curable Disease

Syphilis is a curable disease, and when diagnosed early; that is, within three weeks of the infection, and with antiluetic treatment begun at once and continued for at least two courses of five months each within

one year from date of the infection, a cure is made in a majority of cases.

If the spirochetes have not been discovered until the second stage of the syphilitic infection, it is then possible for them to have left the blood stream, to have invaded the tissues and to have become encapsulated in the tissues which they have invaded. Such cases will require more extensive antiluetic treatment over a longer period of time, but it is believed that, with proper supervision and if the patient will give his cooperation, syphilis in this stage may also be cured. It is true that two or more courses of antiluetic treatment will be required, and the patient must be made to realize that syphilis is, first, a curable disease; second, a chronic disease; third, that it will require three or four years, following any treatment that would be considered sufficient by syphilologists, to determine whether the disease is cured; and, fourth, this fact is correctly determined only by blood and spinal fluid Wassermann tests, cell counts on the spinal fluid, with a correct interpretation of their reactions, eye examinations by ophthalmologists, x-ray examinations, in selected cases as well as provocative Wassermann reactions and a study of the physical findings.

The day of giving a few mercury pills, and continuing treatment only until all external lesions were healed, then advising the patient that he was cured of syphilis, has passed, and syphilologists are, today, trying to replace such incorrect advice in the minds of all patients with the knowledge that syphilis must have months and years of treatment; and, after what is supposed to be sufficient treatment, four years, at least, must elapse with necessary tests and examinations to make a positive, correct and reliable final diagnosis. It is possible today to make a correct and positive diagnosis of syphilis in all cases, with the various methods used by syphilologists, and it is also possible to foretell the effect of the spirochetes in the majority of patients so infected.

Spinal fluid Wassermann tests will give positive reactions during the first year in all cases who have cerebrospinal syphilis. During the second and third years of the infection, this test may or may not give a correct reaction. After the fourth year

a spinal fluid Wassermann reaction will show positive if there is involvement of the cerebrospinal system which will result in tabes, paresis, etc.

It has also been proved, by repeated tests in hundreds of cases, that about 50 percent of spinal fluids will show Wassermann-positive when there are positive clinical symptoms and physical findings in patients who are infected with the spirochetes.

#### A Case Carelessly Treated

I recently saw a case of a man, now 54 years old, who 28 years ago contracted syphilis and was given mercury pills by mouth for three years. All external lesions were then healed and he was advised that he was cured.

Twenty-four years later (4 years ago) he began to notice shooting pains in his legs, which continued and gradually grew more severe. During the day when at his usual work he did not notice the pains, but at night when he retired and wished to sleep they would make it impossible for him to rest.

He consulted a physician, who advised a tonic for his general run-down condition. This he took for six months, at the end of which time there was no improvement in his general condition and the pains in his legs were more severe. A second physician was consulted who also advised a tonic, which he took for another six months.

A third physician was seen and the patient volunteered the information that he had had syphilis but had been cured years ago. This physician took a blood specimen, which was reported negative, and advised him that he did not have syphilis, because the blood Wassermann reaction was reported negative. A fourth physician was consulted and, another blood Wassermann test being reported negative, the physician again advised him that he did not have syphilis.

At last the patient, in desperation, went to a syphilologist, and blood and spinal fluid Wassermann tests and cell count were made and reported negative. He was, however, advised that the negative tests did not prove that he did not have syphilis and that the syphilologist was positive, from the history and symptoms, that he *did* have syphilis and that he would probably find relief from treatment.

The findings on the physical examination were as follows: an enlarged heart, absent knee reflexes, Argyll Robertson pupils, trophic ulcer on the sole of the left foot,

and a blood pressure of 218; which was sufficient evidence, with his history, of the man's luetic infection.

He was vigorously treated with antisyphilitic medication and the pains in his legs were relieved. He is at this time under such treatment, and is feeling quite himself, free from pains, and is thoroughly convinced that he will, for the rest of his life, have to be under the supervision of a syphilologist, which he states he is willing to do. If he will, in the future, give his cooperation as he is doing at this time he may expect to keep the disease checked and to stop its further progress, but a cure, I believe, is, in his case, out of the question. However, cases seen early may expect to be cured when properly treated. They must, to determine if they are cured, have the necessary laboratory tests, physical examinations, with the clinical symptoms correctly interpreted.

These patients can be correctly and positively advised of their present condition, and from time to time, with the supervision of a syphilologist, they may depend upon a correct diagnosis of the results of antiluetic treatment, or of a cure. Patients who have been infected with syphilis for years and who have suffered destruction of tissue will never have the destroyed tissues restored, but every case of luetic infection which has reached the third stage under the care of a syphilologist can be advised of his condition and of the pathological changes which have resulted from the invasion of the spirochetes, and of the probable result of antisyphilitic treatment.

There is an old saying which may be applied to physicians who take the responsibility of treating and advising patients who have syphilitic infections:

*"The Physician who knows that he does not know is a safe physician for his patient, if he acts accordingly. The physician who knows not that he does not know is a real menace to his patient."*

#### Conclusions

Syphilis is a curable disease. If diagnosed within three weeks from date of infection, and treatment administered, the patient has the best possible chance of being cured of the infection with the minimum amount of antiluetic treatment, in the shortest period of time.

If the disease is not diagnosed until it has reached the second stage, the spirochetes may leave the blood stream and invade the

tissues, and it may require two or more courses of antiluetic treatment to cure the patient, if a cure is possible.

If the patient is one who has syphilis in the third stage it may be impossible to cure the disease; however, in seemingly hopeless cases, the disease has been stopped and its progress held in check by adequate treatment, and the patients have lived out their expected years.

Syphilis must have continuous supervision, by a syphilologist, over a period of at least four years following what may be considered sufficient antiluetic treatment for a cure; and this must be done with every patient.

To successfully treat syphilis, months and years will be required in some cases; and, to give correct information as to the results of the treatment which has been administered, a correct interpretation of many tests and examinations must be made.

The great army of patients who have been infected with syphilis years ago, who

have been incorrectly informed as to their cure by the attending physician, or who, through neglect, have not had continued and persistent treatment to stop its progress, hold it in check or cure; and the great numbers of patients seen on the streets daily with locomotor ataxia, the patients seen by physicians almost daily, recognized or unrecognized, who are beginning to have pronounced symptoms of cerebrospinal syphilis but who are not as yet confined in institutions for nervous cases, are sufficient evidence that more knowledge is needed along this line.

Add to this the long list of deaths from heart disease, apoplexy and other similar conditions, most of which cases are of syphilitic origin, and the evidences of ignorance or carelessness become impressive.

We will hope, in the future, to see less and less numbers of patients affected with insanity, paresis, paralysis, apoplexy, tabes heart disease, and other conditions resulting from the effects of syphilitic infections.

## The Tuberculous Etiology of Psoriasis

By JOSEPH HOLLOS, M.D., New York City

**P**SORIASIS is one of the diseases the etiology of which is unknown. H. Goodman, too, is of this opinion in his study of psoriasis in the May and June issues of CLINICAL MEDICINE. With reference to his paper, I would like to call the attention of physicians to the tuberculous origin of this disease.

According to Poncet and Leriche<sup>1</sup>, psoriasis is a dermatosis caused by the tubercle bacillus, and is often a complication of rheumatism whose origin is a latent tuberculous intoxication.

My attention was called to the connection of psoriasis with tuberculosis by F. Weleminsky<sup>2</sup>, who treated and cured several cases of this disease with his tuberculomucin, and came to the conclusion that, on account of the healing, they were of tuberculous origin.

I wish to publish the history of two of my cases which indicate the connection with tuberculosis very convincingly, and also the successful treatment on this basis. Both patients have been ill for from 16 to 20 years, in spite of various treatments. The patients had shown other signs of tuberculous intoxications also. By the tuberculo-immunoblood treatment of Spengler

(see CLIN. MED., vol. 32, p. 673, and vol. 33, p. 84), the existing intoxication symptoms disappeared after various reactions, the abnormal temperature returned to normal and a distinct reaction of the eruptions of the skin took place, which designated healing.

### Case Reports

Case 1.—Miss M. H., 28 years old.

*Anamnesis.*—She was healthy until her twelfth year, when she developed psoriasis, which covered the whole body. The condition existed for a year, when it disappeared, but not entirely, and recurred at short intervals. It cleared up only after two sojourns at the seashore for a period of half a year each time. The patient received all kinds of treatment—x-ray, alpine lamp, ointments, etc.

She had suffered, since her fourteenth or fifteenth year, with severe headaches which were sometimes of a whole week's duration. This condition had improved recently, but she still suffered acute headaches after each menstruation. She was often dizzy, especially before the menstruation, and had suffered since childhood from diarrhea. She had been, until recently, very tired in the mornings, was greatly inclined to perspire and also had night sweats a few years ago.



She had been losing in weight and dropped down, three or four years ago, to eighty pounds.

She is extremely nervous, irritable, and occasionally has uncontrollable crying spells. She often has pain in the back, trunk and thighs. She is easily chilled and her feet are always cold. The first menstruation began at the age of 14; the flow is scanty and of one day's duration. She has had dysmenorrhea since her seventeenth year.

*Family History.*—The father was very feeble in his youth and coughed for a long time. One brother died of tuberculous meningitis at the age of one and one-half years.

*Present Condition.*—The patient is pale, weakly developed and poorly nourished. The right apex is slightly sunken with slight Pottenger phenomenon; the motion of the right shoulder is lessened. Pulse is 60; weight 93 pounds. There are a great many psoriatic eruptions over the head, arms, thighs, legs, and trunk, ranging from the size of a lentil to that of a silver quarter.

*Treatment and course.*—From the first immunoblood injection (January 14, 1921), with 0.5 cc. of the dilution No. VIII, the eruptions began to itch severely and new eruptions appeared. She had never had itching before.

After the second and third injections (dilution Nos. VIII and VII) the itching increased and the eruption became pinkish in color. After the second injection she developed a very severe headache, which was repeated three times successively. After the third injection she suffered great faintness and dizziness.

The itching continued. The patient began to acquire an appetite, which gradually increased. Soon after, the general condition improved, the feeling of fatigue disappeared, the bowels moved well and menstruation became normal. After the fifth injection, the lesions began to pale and shed and after two and one-half months of treatment are partly gone and partly shed. The temperature, which at first was 95° to 98° F., gradually approached normal as the treatment progressed.

Case No. 2. Mrs. J. B., 28 years old.

*Anamnesis.*—The patient had suffered with psoriasis all her life, with periodical improvements. She had used all kinds of internal medication and ointments. She was constipated from childhood and always had to take laxatives. During the period of puberty she suffered from prolonged headaches.

She sleeps very deeply and is sleepy in the daytime; is ill-humored and nervous; tires very easily. Occasionally she suffers from backaches. Has had dysmenorrhea since the beginning of menstruation.

*Present Condition.*—The patient is fairly well developed and moderately nourished. Over both apices a strong Pottenger phenomenon is present; minimal crepitation over the left. No fever. Pulse 92.

Psoriatic eruptions on elbows, knees, back and thighs.

*Treatment and Course.*—The first injection was given (Dec. 13, 1920) with 0.5 cc. of immunoblood No. IX. The eruptions began to itch the next day and this continued for three days. On the fourth day there was a slight rise of temperature (99° F.); three days later 100.4° F. for one day. At the same time new eruptions developed and the old ones itched for two days. The eruptions were brighter in color. Constipation disappeared. After the third injection, the eruptions were much brighter and multiplied. The feeling of fatigue augmented and constipation and headache returned (toxic reaction). All symptoms disappeared after the injection with the dilution No. IX.

After further treatment all toxic symptoms (headache, constipation, nervousness, dysmenorrhea) completely disappeared. A local reaction in the temporo-mandibular joint appeared in the meanwhile, showing a painful swelling for three days. The patient gained nine pounds. The psoriatic patches partly cleared up, with profuse desquamation, leaving pigmented spots. The temperature, which fluctuated greatly in the beginning, became stabilized.

#### Discussion

We do not find psoriasis in acute or subacute tuberculosis, nor in severe, chronic consumptives; but we find it in cases with chronic latency or slight manifestation; namely, in cases in which the immunity—the reactive power of the organism—is properly developed. That is the reason why the connection between these diseases has not been obvious. There are probably other etiological factors also, and further investigation will have to clear up this question thoroughly.

The cases of Weleminsky which were cured by tuberculin injections, and my own cases cured by tuberculosis immunoblood treatment after preceding local reactions, strongly suggest a tuberculous origin.

The disease is rarer among negroes, probably because they do not pass over the same

long course of natural immunity as the white race and therefore the hypersensitivity against the tuberculosis toxins is not so highly developed. That is the reason, on the other hand, why the deathrate from tuberculosis is the highest among them.

It is very probable that, in the hypersensitive organism caused by partial immunity, certain endocrine disturbances develop, which lead secondarily to the path-

ological changes in the skin. Disturbances of the thyroid seem to play an important part; but so do those of other endocrine glands, also. To explain this question, we need further investigations in this direction.

2. W. 83rd St.

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## The Present Status of Epidermophytosis

By JACOB SPITZ, M.D., Boston, Mass.

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**I**NASMUCH as there has gradually, especially in recent years, been developing a tendency on the part of many medical men, particularly dermatologists, to recognize and differentiate that fungus infection known as epidermophytosis, it seems proper that its status be set forth as it is at present.

This condition has, in the past, been classified under various names, such as eczema marginatum, eczematous ringworm, and even eczema itself, among many others. It is only comparatively recently that it has been definitely differentiated as an entity in the ringworm fungus class.

**History.**—In 1844 Gruby first described this condition in a rather indefinite fashion. About 20 years later, Hebra did the same, calling it eczema marginatum, a name which is still rather commonly used. A little later Pick and Kaposi found the fungus in scrapings from the lesions of individuals suffering from the disease. In 1892, Monk-tar, of Constantinople, called attention to a number of cases he had encountered there; and in 1905, Castellani demonstrated the fungus in dhobie itch, which is an epidermophytosis, complicated by an ordinary pyogenic infection, not uncommon in tropical countries.

In 1907, Sabouraud determined that the fungus was not a definite trichophyton, but belonged to another genus which he named *epidermophyton inguinale*, the latter portion of the name being applied because he obtained those particular scrapings from the inguinal or crural type. In 1910, Whitfield classified the disease in 3 types: (1) an acute vesico-bullous form, of sudden onset, with all the characteristics of a vesicular eczema or dyshydrosis; (2) a chronic intertrigo of the toes; and (3) a chronic hyperkeratotic variety, with scattered vesicles and pustules.

From 1916 up to and including 1922, papers by Ormsby, White, Greenwood, Wende, Collins, and Butler, have further enlightened us so that now we recognize 6 clinical types of the disease: (a) macular, (b) papular, (c) vesicular, (d) intertrigenous, (e) hyperkeratotic, and (f) the ungual type.

#### Location, Incidence, Duration and Source

The condition may occur anywhere, but is most commonly found on the feet, between the toes, especially the fourth and fifth, and on the plantar surfaces of the feet. Next in frequency, it involves the hands, especially the fingers and the palms.

Next to the hands and feet, the most common site of the lesions is the inguinal region, where the first observations were made; and then, in the order named, the legs, anus, thighs, axillae, nates, abdomen, and face.

**Sex and Incidence.**—The disease is much more common in the male, especially between the ages of thirty and forty. Very few cases have been reported in the female.

It attacks the rich as well as the poor, but is more common in the latter and in the middle classes, particularly those whose occupation keeps them on their feet for a considerable portion of the day. Poor hygiene, personal uncleanness and infrequent bathing all play important parts in producing and fostering the disease.

**Duration.**—The time which this condition takes to clear up depends, of course, on the severity and on the treatment employed and its efficacy. All things being equal and treatment being instituted, it is a disease of months rather than of years.

**Sources of Infection and Transmissibility.**—The exact source of the disease is rather problematical, but is probably the same as in other fungus infections. Autoinoculation

has not been proven to take place, but it is not infrequent or unusual to find more than one case at the same time in one family.

#### Appearance of Lesions

*On the Foot.*—Vesicles are formed in the deeper layer of the epidermis. These tend to group, and are usually found between the fourth and fifth toes. Due to friction and moisture, maceration occurs, leaving a whitened, sodden epidermis that may be detached from a dark red, dry base. Elsewhere on the foot the vesicles are well preserved, developing a tendency to grouping and becoming confluent. There is here usually a desiccation of the roof of the vesicle. On the ball and heel of the foot, due to pressure and irritation, a hyperkeratosis occurs, which, when pronounced, is comparable to a true callosity, causing considerable discomfort on walking.

*On the Hands.*—Here the general appearance is as in eczema and, very frequently, the microscope is our only and final means of differentiation. Polymorphism occurs and there is much less itching and burning than in eczema. The disease shows a predilection for the sides of the fingers. The lesions are circumscribed and there is usually no appearance of papules or pustules as in acute eczema. The dorsal surfaces of the hands are usually not involved. Occasionally grouping and coalescence occurs, with formation of bullæ, but with no objective inflammatory signs. Absorption occurs, leaving a dark brown or yellowish spot which eventually desiccates.

*Inguinal or Crural Type.*—It is this type which furnished the various investigators much of their material, at one time it being considered a distinct entity. It has usually been known by the name of epidermophytosis inguinale. Its different features, however, are caused by the moisture and irritation of the part of the body. It must be clearly understood that this is an epidermophyton infection and not one caused by the trichophyton. Here there occurs an erythema intertrigo. The primary lesion, a macule, papule, or vesicle, usually occurs in the left crural region. The lesions spread peripherally, forming rings. The borders of these rings may or may not be raised, depending upon whether the condition is or is not macular. Brownish crusts form and the parts within the rings become yellowish or dark brown. The condition, in the inguinal type is usually limited to the region between scrotum and thigh.

*Axillae.*—Here the condition appears and acts as in the crural type.

*Back and Abdomen.*—In this location the disease takes on a sharply margined, erythematous character. The lesions are covered with thin, gray, dry scales.

*Breasts.*—Usually only the inframammary region is involved and simulates the crural type.

*Nails.*—Here, the diagnosis is not easy. It is not common to see a change in the nail bed. The nail only becomes friable and breaks off easily.

*Hair.*—The hair is never involved.

The condition is aggravated in warm or tropical climates, so much so that lichenification frequently occurs.

#### Laboratory Findings

Scrapings show numerous mycelia of uniform thickness and highly refractile. Branching occurs at right angles and septa are observed within segments. Although spores are present, they are very difficult to find.

In preparing a scraping for examination, the roof of the vesicle should be excised with a Graefe knife, inverted, and so placed on the slide. It should then be immersed in a solution of potassium hydroxide, a cover slip firmly placed upon it, and then gently heated over a flame.

*Cultivation and Isolation.*—The fungus grows on most media but, according to Sabouraud, grows best on his maltose agar. Growth is usually not visible until the fourth or fifth day. In all cultures, the colony begins as a cotton-like growth, usually white. The mycelial threads are septated, but there may be some occasional non-septated, highly granular branches. The asci bear two to eight or more spores. The deeper portions may be yellow to orange. Guinea pig inoculations produce typical lesions.

*Prognosis.*—This should be guarded as to absolute time of cure. A more or less positive assurance that it is a question of months is as definite as one should be.

#### Treatment

The treatment is still more or less problematical. Different views as to this are plentiful, and a search for a specific still goes on.

It is important to remember that the disease is most active in the warm seasons or climates. It is most prevalent from May to July, and at least so from August to No-

vember. With the change to woolens, in November, it again becomes more common.

The principle of treatment consists in desiccation of the diseased epidermis and prevention, by mild antiseptics, of the recurrence of the condition. Too much stimulation, however, makes for an uncomfortable and bedridden patient. So here, as in so many other diseases, tact and common sense must be used.

In the foot cases, diachylon ointment may first be used for 2 or 3 days. Then, the diseased epidermis may be removed with soap and water and brisk rubbing with a towel. It is then well to paint the reddened base with a 20-percent solution of silver nitrate, or a 10-percent solution of tincture of iodine in alcohol, although the former is preferable, on account of the protective silver albuminate formed. This treatment soon causes a further epidermal shedding with a removal of most or all of the fungi. Every three days the ointment should be washed off with benzine, and the silver or iodine again applied. After each application of the latter, it may be well to apply Whitfield's ointment which is: salicylic acid, 2.0; benzoic acid, 4.0; and benzoated lard, 30.0. If the condition is too acute, the skin will not tolerate this, in which case more lard must be added to dilute the ointment. This ointment is very effective and is both keratolytic and antiparasitic. This treatment is to be continued until the epidermis becomes fungus-free. To prevent recurrence, a 15-percent sodium hyposulphite solution or a 1:5000 potassium permanganate solution may be used as a daily foot bath for at least two months.

In some of the most obstinate cases it has been suggested that the following might be of use: oil of thymol, 1.3; oil of cinnamon, 0.4; and alcohol, 30.0. We have had very questionable results with this solution.

In the hyperkeratotic types, with the formation of callosities, the latter should be pared down as much as possible and a 40-percent salicylic plaster applied and changed every third day. In about eight weeks the tissue will be so thinned as to permit the suggested treatment to be instituted. A 2- to 10-percent pyrogallac acid ointment may be used, in some cases, in

place of the Whitfield ointment, or even chrysarobin in the same strength.

In the condition affecting other parts of the body the same treatment is used, except for the modifications of the strengths of the medicaments as the needs require, and omitting the salicylic acid plaster, being always careful not to overstimulate for fear that the skin may become lichenified.

In the treatment of the disease in the crural, inframammary, axillary, and glabrous areas, if the skin becomes lichenified, crude coal tar, daily applied, or C. J. White's "C. A. T. mixture" (collodion; acetone; crude coal tar;  $\bar{a}\bar{a}$  20.0), painted on daily for four days; allowed to peel; and then repainted is effective.

Ruggles suggests the following, applied daily: zinc oxide, 6.0; tar ointment, 12.0; phenol, 1.0; rose water ointment, 18.0. This is applied twice a day. The feet are washed three times a week with tar soap.

With a subsiding of the acuteness the following is applied until the skin is normal, and is used for a month or two afterwards for prophylaxis;—Salicylic acid, 1.3; tannic acid, 6.0; alcohol, 66.0; (or tincture iodine, 4.0, Spts. camphor, 28.0). If the skin is fissured or acutely inflamed, these should not be used.

The x-ray has of course been used, and is one of the most effective means of combating the disease.

### Conclusions

- 1.—Epidermophytosis is a distinct entity and should be recognized and treated as such.
- 2.—It may attack any part of the body, but is usually found on the feet.
- 3.—It is most common in males, between the ages of 30 and 40 years.
- 4.—It is caused by the epidermophyton.
- 5.—Laboratory recognition is not difficult.
- 6.—It is worse in warmer weather, and especially so in the tropics where, when secondarily infected, it is known as dhobie itch.
- 7.—Its prognosis should be guarded and considered a matter of months.
- 8.—Its treatment, at present, is more or less unsatisfactory, and it certainly deserves much more study.

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# The Navy's Health Problem

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EVERY American citizen who is proud of our Navy and who wishes it to attain the maximum of efficiency should be interested in the revelations which I am about to make. It is not my intention to be unfair, sensational, nor to indulge in destructive criticisms, but to discuss pertinent matters for the information of those civilian physicians who have never served in our corps, and to make an appeal, with the ultimate purpose of improving health, saving money, and strengthening the Nation's defense.

In order to make the situation clear, a comparison is necessary. Previous to entering the Service, I practiced my profession for several years in civil life, and, not unlike the average doctor—whose knowledge of the Navy is, I suspect, limited to the casual impression made by the launching of a battleship with the presentation of a silver service, a dress parade, or the recruiting posters—whose time is devoted to his own work, I had no occasion to give any thought to Navy health conditions.

Now that I know from first-hand acquaintance the actual state of the Navy's health, I am of the opinion that the American people are entitled to know some of the end results of our stewardship, and also, from the able criticisms of our best officers, that they desire that the American people should be acquainted with conditions, in order to give us a much needed helping hand. The fact that these conditions have not been exploited is not due to a lack of interest as so many of our reports establish.

Before going into this subject, I wrote an official letter to the Attorney General of the United States, the Hon. Harlan F. Stone, requesting an opinion as to my work, whose reply speaks for itself: "You are engaged in a very worthy work and I wish you all success in it."

## The Civilian Physician and His Patient

When a patient presents himself to a civilian physician, and the condition is found not serious, appropriate instructions and medication, can, if necessary, be carried out without putting him to bed; besides which such a patient can adapt himself to his daily task. But, if the case warrants rest in bed and if the progress is unsatisfactory, able counsel is sought and it sometimes happens that the family is unduly alarmed,

when consultation is not actually required; but the request is seldom denied, for diplomatic reasons. This is necessary, not only for the patient's good, but also for the physician's own protection and general reputation in the community, as his livelihood depends upon his clientele, who possess freedom of speech and action—and use it.

The average physician has either served an internship or has been an assistant to an older physician until sufficiently developed in the bedside recognition of the average disease to hang out his own shingle. Most doctors, in recent years, keep case records and, in due course, read a paper before some medical society, where the discussions are entered into by others. Such deliberations are printed in medical journals for the benefit of those who were not present and it not infrequently happens that matters of unusual interest find their way into the daily newspapers for the benefit of the laymen. This is especially true of public health work.

I wish to recite a few instances which are both interesting and pertinent. (1) The Surgeon General of the Public Health Service said, in part, to the Virginia Public Health Association, April 2, 1926, "Public health work is still a very young profession." (2) In an exhaustive article in the *American Review of Reviews* for April, 1926, Dr. W. S. Rankin, one of the Directors of the Duke Endowment, has presented a comprehensive review of the health problems confronting the states of North and South Carolina, together with the corrections which will be enforced. (3) Virginia's health status was freely discussed before the Virginia Legislature during March, 1926, which was followed by a timely editorial in the *Richmond Times-Dispatch*. (4) The excellent work done by the Metropolitan Life Insurance Company in preventive medicine, with especial reference to the increase in the span of human life, by means of annual physical examinations, has been so thoroughly exploited in magazines that comment is not necessary.

## Conditions in the Navy

When I entered the Navy Medical Corps, I was much disappointed to find that the system of transportation and care of the sick was, in many respects, very different from that of civil life and, while certain variations are required, I am not alone in



the belief that adjustments are necessary if we are to have a physically fit personnel, which is the only way we can have a national defense commensurate with American man-power.

It was due to the comparison between conditions in civil life and our present naval system, that I was led to make a survey of our Navy, covering a period of years, and to travel many thousand miles by land and sea. I have stated my ideas in two books, with the sole idea of bringing about adjustments in the interests of the American Navy.

I wish to acknowledge here that the able and timely criticisms of our best and most capable officers, who sincerely desire to see certain changes but whose voices do not reach the people, have been of much assistance in my work. It required considerable inquiry and observation to become acquainted with the "system," as it is frequently referred to, which cannot be adequately dealt with in this paper.

In order to earn retirement for age, thirty years service in the Navy is required. Under present conditions, we not infrequently commission recent graduates who are untrained in physical diagnosis, which is so important in the selection of physically fit recruits. It seems pertinent here to quote a remark made by the late Rear Admiral Robley D. Evans, with reference to the line officer, in one of his books: "I passed my entrance examinations to the Naval Academy in 1860. Fortunately for many of us, they were very simple; otherwise many of us would not have followed the Navy as a profession. Book-schools and mental over-training are not so good as industrial schools."

#### The Naval Medical School

At present, "book" doctors—the newly-made medical officers—are transferred to the Navy Medical School, at Washington, for further "mental training" for a period of four or more months, depending upon the exigencies of the establishment. The curriculum of this institution includes: surgery, tropical and preventive medicine, medical diagnosis, cardiovascular diseases, diseases of the eye and ear, hygiene and sanitation, epidemiology, genitourinary diseases, psychiatry, neurology, aviation medicine, naval administration, chemical warfare, pathology, zoology, bacteriology, serology, hematology, endocrinology, and chemistry.

Nothing is further from my intention than to question the ability of the teachers

in this institution or the caliber of its student-officers, but I do wish to state, in the interest of our First Line of Defense, that it is manifestly impossible for the average human mind to become proficient, to any considerable degree, in twenty-three subjects in such a short space of time as four months.

Certain graduates of this school are sent to clinics for special instruction. The Surgeon General recites, in his annual report to the Secretary of the Navy for the year 1920, "The shortage of specialists spoken of in my last report became more pronounced. One group of officers, desiring to specialize, attended a four months' course at the New York eye and ear infirmary. Those selected for further postgraduate work have an added responsibility placed upon themselves to render to the Navy a service compatible with their opportunities. They are not considered specialists."

I find, on examining the record, that in 1920 there were 2,864 original cases of acute and chronic diseases of the ear, 682 of which were invalidated back to civil life, and the aggregate number of days spent on the sick list amounted to 80,550, our total personnel being 298,774. The statistics six years later (1925) show 951 original cases of ear diseases, in a personnel of 119,280, 109 of which were invalidated back to civil life. These patients were unfit for duty during 28,869 days. This incapacity is not the result of an annual examination, but only those who applied for treatment.

All of us are aware that it requires several years to become equipped as an ear specialist, and one who is thus equipped, is not going to enter the Navy as a junior lieutenant, when he can earn three times as much in civil life; but, if the costs involved in transportation, uniforms, hospitalization, pensions, unearned salaries, etc., were applied upon a rational business basis, it would pay us handsomely to employ the ablest men and pay the price which they would properly charge. I have seen recruits who should never have been accepted and also those who, incurring disabilities, received inadequate care. Our *ordnance* experts are mature both in age and experience.

#### Weak Spots in the Present System

As I see it the system has a number of weak spots. Our patients are without appeal; promotions are, in my opinion, based too much on written examinations; health statistics are not discussed as they should be before medical societies; our incomes are

forthcoming under all conditions; there is a lack of bedside consultation with mature officers, because their duties are of an administrative character; there are no costs for equipment and assistants; and, in addition, we are clothed with military rank in the sick chamber. One cannot get away from the belief that, with such a combination, there is a natural tendency, with the best of us, to become careless; and while perfection is not attained in civil life—nor in any organization for that matter—it is agreed by many of our most interested officers that reforms must be made if we are to have an adequate system of preventive medicine, which is so essential in a fighting machine.

Among the things in which medical officers are engaged are: inspecting quarters for cleanliness; surveying food and property for condemnation; acting as members of courts and boards; rendering nonprofessional opinions; taking the responsibility for the operation of the mess hall, the garage, the ambulances, the carpenter and paint shops, the landscape, repairs to hospital buildings, fire drills, etc.

Our capable pharmacists, in too many cases, prepare administrative papers; care for records; act as masters at arms; are responsible for the brig; and act as stenographers to the senior medical officers.

One interested officer writes, "How often, in Government service, we long for 'short cuts' in our paper work. How frequently we hear bitter comments about it. Surely something is amiss when, at one naval hospital not long ago, fourteen forms were required to pass a patient through a dental clinic. How frequently are constructive criticisms in this subject voiced in staff meetings? Far too seldom. Often the more conscientious one is, the more time he must devote to his paper routine. Such a man, try as he will, cannot help, at times, neglecting certain features of his clinical work."

From 1920 to 1925, inclusive, 617,852 patients were admitted to the sick list. The Surgeon General says in his last annual report, "It has become clear in recent years that the young physician, although he may be graduated from a class, a school and an approved hospital, is by no means then equipped for service of the kind required of him in the Navy."

In spite of all that has been said, it would be entirely unjust not to repeat that we do have capable, forceful, interested officers, and to prove that fact I quote an extract

from a report of one such: "Each year of overhaul at navy yards, especially those of the North, during the trying winter months, brings in a fat quota of disease when we foot up the annual array of cases of mumps, bronchitis, tonsillitis and influenza. This is undoubtedly due largely to the discomfort and discontentment following or resulting from tiresome weeks of exposure to cold and dirt made necessary by the horde of workmen trekking in and out of the ship, and the leaving of hatches and ports open for the leads of pneumatic hose, thus creating drafts. There is no doubt that such factors predispose to infection, when added to them are those of noise and disorder tending to mental impairment, and so naturally a tendency to lowered resistance. Perhaps this is all reiteration, but I repeat that the time has come to get away from stubborn routine and not keep following over the same wall. Suitable, comfortable barracks at navy yards, to be occupied only by ship's company during overhaul periods, are made urgent in view of the many recommendations and pleas for such by commanding officers of long experience."

What is the remedy? The only answer is: employ competent doctors; pay them the price which, in the end, is economy; select physically fit men for enlistment; put them in hygienic surroundings, and give them an annual physical examination; employ stenographers, clerks and business men for routine duties, thus relieving the medical men of the nonmedical things in which they are engaged, so that they may devote more time to preventive medicine and the proper care of the sick.

In order to study preventive medicine with any degree of accuracy—we ought to keep a record of mortality of those "invalided out of the Service" and enter it in the Surgeon General's annual report. Perhaps the Pension Office could furnish this information.

The Surgeon General's annual report, now rendered to the Honorable Secretary of the Navy, should, in my opinion, be made out to an untrammelled commission who would give it much needed publicity. The question naturally arises, when the Secretary peruses the statistical tables and encounters such entries as "dementia precox," "pes cavus," "scabies," "otitis media," etcetera, does he comprehend, fully, what these items mean in a fighting machine? Granting that he does, his time is so occupied with ships, docks, navy yards, inspections, etc., that he

can hardly devote the necessary study to these important matters.

Secretary Wilbur, according to a press dispatch, September 30, 1925, said, "All reports agree that the personnel situation in the Navy is the best in years, if not ever." Our fighting machine for the year quoted (1925) was composed of 119,280 fighters, who should always be ready for any emergency. Only 66 percent of the sickness was cared for in naval hospitals for this one year, and this cost \$3,321,557.95.

The average congressman does not, in my opinion, appreciate health matters any more than does the Secretary of the Navy; but there are perhaps twenty members of Congress who are physicians, and it would be

a step toward advancement if these physicians would form a Committee on Health, which would be splendidly adapted to carry out our preentrance promises to the recruit, "Health and Happiness."

My undertaking being so extraordinary, a word of explanation may not be misplaced. This responsibility occurred to me as my plain duty to the people. My criticisms are in the public's interest. There is no occasion for destructive criticisms, and in order to accomplish good it would be disastrous to indulge in such, as well as being unjust to all concerned. My sole aim is to help the American Sailor, and the people of this Country, whose safety depends upon his efficiency and fitness.

## Rectal Diseases Amenable to Office Treatment

By J. F. MONTAGUE, M.D., F.A.C.S., New York City

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IT HAS long been the custom to consider rectal diseases as being amenable, in many instances, to office methods of treatment, in contradistinction to more radical measures which require a hospital stay. That this custom is founded upon truth is to a great extent proven by the success of these methods. The results obtained in successful cases are gratifying to both doctor and patient. Indeed, if a doctor is thoroughly familiar with the technic of such methods and has, moreover, a knowledge of those guides to judgment whereby one can properly select his cases, there is no group of therapeutic procedures which will give more satisfactory results and satisfied patients.

My last remark implies that there are limitations to office treatment as well as applications. One must be conversant with these limitations in order that he may avoid doing an injustice to his patient and to his own reputation. To state more specifically the applications and limitations of office treatment of some rectal diseases I am submitting the following admittedly sketchy comments and suggestions.

### Careful Examination Necessary

Let us start with the assumption that a careful examination of the anus, rectum and sigmoid colon has been made. This is an imperative preliminary to any treat-

ment of rectal disease whether that treatment be made in the office or in the hospital. The object of such an examination should be to confirm the surmise made from the history and to exclude the presence of disease other than the condition for which the patient has presented himself. For instance; a patient presents himself complaining of bleeding from the rectum. The surmise made on the basis of this history is that the patient is suffering from hemorrhoids, since they are the most frequent cause of that symptom. On examination of the anorectal region we find that the patient really has hemorrhoids. Examination of the sigmoid colon shows, however, that he also has an ulcerating carcinoma of the recto-sigmoid junction. The wisdom of having made a complete examination immediately becomes apparent, for otherwise we would have done the patient the gross injustice of treating a relatively benign condition such as hemorrhoids while neglecting the serious condition, cancer.

### Hemorrhoids

Hemorrhoids are, in many instances, particularly adaptable to office treatment. By the employment of local anesthesia a thrombotic external hemorrhoid may be quickly evacuated in a complete manner that causes the patient no pain and gives him instant relief. Similarly a ruptured or ulcerated external hemorrhoid may be disposed of.

The injection treatment of hemorrhoids is one of the best known and most widely used of the various office methods and will produce excellent results if properly given. It should never be attempted in the cases of external hemorrhoids of any variety; moreover, it should not be used in the instance of internal hemorrhoids that have become complicated by the advent of inflammation, ulceration, thrombosis or gangrene. Its application is, indeed, limited to one variety and that is the simple, uncomplicated, internal hemorrhoid. In that type it gives most gratifying results. One must be careful, however, of his technic and the composition of his solution. I cannot dilate upon this here, but the literature will afford full details, particularly my monograph on "The Modern Treatment of Hemorrhoids," published by Lippincott, of Philadelphia.

#### Abscesses and Fistulas

Ano-rectal abscesses are, to my mind, particularly adaptable to office treatment since they should be opened the very moment they are discovered. Postponing this matter of evacuation until the following day in order to have the patient enter the hospital does much harm, and in my opinion, is responsible for many of the fistulas seen as a sequel to abscesses. Immediate and complete evacuation of the abscess cavity is desirable but even an incomplete evacuation is better than none since it avoids further burrowing of the pus. Later this preliminary drainage may be supplemented by more complete incision. Drains of cellosilk will be found greatly superior to the usual gauze drains since they are quite as efficient, yet cause no pain upon their withdrawal.

Fistulas can be, in many instances, adequately dealt with in the office. Under local anesthesia the tract may be thoroughly laid open or completely excised, depending upon the variety of fistula one is dealing with. In the more complicated varieties which involve extensive wound formation it is wiser to confine the patient than to have him run any risk. However, a great number of fistulas can be successfully treated by operating in stages, a portion of the tract at a time. As a dressing for such wounds I now use perineal dressing pads. These are attached to a belt and fastened by a clasp that avoids the use of pins. The pads may be discarded; the belt retained. They will be found a great improvement over the T binder, both in point of economy and of convenience.

#### Cryptitis and Condylomas

Cryptitis may be successfully treated in the office with the aid of local anesthesia. Drainage of the crypts and the removal of hypertrophied anal papillae are relatively simple procedures that may be easily done in the office. It is well to gently dilate the sphincter prior to this so that none of the crypts may be overlooked, as they most certainly will be if the spasticity of the sphincter is not overcome. If infiltration of the local anesthetic has been properly done there is no trouble in obtaining splendid relaxation of the sphincter with gentle digital manipulation.

Condylomas may be painlessly excised under local anesthesia. It is a mistake to consider these as harmless vegetations. They are the result of specific infection and should be handled, literally, "with gloves." It is also well to bear in mind that you have not done your full duty to the patient in merely excising the condylomas. They are the local manifestation of a systemic disease, syphilis. This fact must be borne in mind and the patient treated accordingly. A Wassermann blood test should be done the moment the diagnosis of condyloma is made.

#### Fissure and Pruritus

Fissure in ano is a condition that will respond to office treatment if tactfully handled. I have used the operation of submucous sphinctotomy with much success; also the transcision and the excision methods. All of these may be done in the office. The injection method of treating fissure in ano is particularly adaptable to treatment in the office.

Pruritus ani is preeminently a condition for office treatment, and in this connection the importance of a thorough examination is worthy of mention. I have used pruritus vaccine (Lederle) in a large series of cases, shortly to be reported, with very gratifying results. The abundance of bacteria in this area and the constant scratching these patients subject the part to render it exceptionally prone to infection. To minimize this infection I use the vaccine and find it of great service. In many instances the itching will entirely disappear with the cessation of secondary infection.

I trust the above comments serve to draw the attention of physicians in general practice to the fact that the modern proctologist has at his command many contrivances and

methods not fully valued or completely known to them. Since a knowledge of these methods is easily obtainable I believe that they will find it very well worth while to acquaint themselves with such methods so that they may competently treat the ordinary case of rectal disease that they meet

with in general practice. Placebo treatment, suppository treatment and all other forms of procrastination are only to be construed by one word and that is *neglect*. This appears unpardonable to one familiar with the simple, effective methods of the office treatment of rectal diseases.

## The Diagnosis of Malignant Growths in the Rectum

By CHARLES J. DRUECK, M.D., Chicago

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WHEN a patient applies to us for treatment, we must take a careful history, and then, having carefully weighed each discomfort or other symptom of which he complains, proceed with the physical examination by means of:

1.—Direct digital palpation and indirect manipulation through the vaginal or abdominal walls.

2.—Inspection through the proctoscope.

3.—The study of roentgenograms.

The most valuable means of diagnosis is palpation with the finger accustomed to the feel of both normal and abnormal tissues and structures. We are fortunate if we can bring our fingers in contact with a suspected area for it discloses evidence not obtainable in any other way, and it enables us to feel practically the entire anatomical rectum by putting the patient in a suitable position.

Digital examination is of great value in all rectal strictures, and in cancer it is absolutely necessary because here a hard nodular mass will be found which involves perhaps only one side of the rectum, while the other side is covered with normal mucous membrane; or the mass may encircle the rectum, leaving only a small opening in the middle. Its peculiar character on palpation is a hard, rough, irregular mass projecting into the rectum, easily differentiating it from simple stricture, which is smooth, or a tubercular stricture, which undermines surrounding areas.

The commonest form of cancer within the rectum is the scirrhus. It usually occurs just above the internal sphincter or in the ampulla of the rectum, but may occur elsewhere. It arises as a hard, nodular mass and extends circularly until it involves the whole circumference of the rectum, leaving only a small opening in the middle. This

latter condition is the usual finding when the physician is consulted. Mickulitz found three-fourths of his cases so progressed. Gussenbauer estimates that 65 percent of all rectal cancers are of this variety. These cancers grow lengthwise of the bowel very slowly and rarely involve more than two inches.

Cancers high up in the rectum and in the sigmoid are the most difficult to diagnose and have been repeatedly mistaken for a diseased ovary or tube or for other pelvic tumors.

The encephaloid cancer occurs as a soft polypoid mass, very like a benign adenoma, but it has a broad base which infiltrates the submucous tissue. These tumors contribute 15 percent of the rectal cancers. They break down very early and with few exceptions have reached the ulcerative stage by the time they are seen by the physician. By palpation irregular masses appear to have been broken off roughly. Raised edges surround the ulcer and give it a crater-like appearance. The finger, being well anointed and inserted, feels this rough irregular edge all around the constriction and then suddenly passes into a wider channel above where masses of hardened feces are frequently found. Exceptionally, a softer polypoid mass is found simulating a benign adenoma, but having a broad base which infiltrates the submucous tissue.

Every possible care must be taken in passing the finger through the obstruction where it surrounds the rectum, especially if near the peritoneal surfaces, for fear of tearing through the friable wall and entering the abdomen. The necrosis may leave a very thin partition at some one point or the ulceration in the bowel above the obstruction may be very deep. The finger must never be pushed hurriedly through



a carcinomatous stricture and even soft bougies must be used with great caution. Numerous cases of rupture and sudden death have resulted from carelessness in making an examination.

Indirect examination is carried out in both sexes upon the abdomen; in females through the vagina. Palpation of the abdominal wall discloses tumors, masses, tender points, enlargement of the viscera, etc., findings which are peculiar to malignancy rather than to simple rectal diseases. Pelvic examination through the vagina is indispensable in such conditions because the suspected growth may be extrarectal and for the additional reason that there is an advantage in being able to palpate with two fingers in place of one, a method usually not applicable to rectal examination except under anesthesia. The character of any suspected mass may be further checked up by introducing one finger into the rectum, the other into the vagina.

Kuttner<sup>1</sup> emphasized the importance of having the intestine thoroughly cleared out and the bladder empty before making a digital examination. On suspicion of spasm, a general anesthetic should be given.

The prostate or a fold of the adnexa may be mistaken for a cancer during the digital examination; in several cases operations have been performed on this blunder. In one instance a small tumor in the adnexa was resected as the source of the tenesmus, etc., and the cancer encircling the sigmoid flexure was not discovered even during the operation. Even with a palpable tumor, roentgenography should not be omitted; in the digital examination a high tumor may be pushed out of its natural place, and the surgeon be misled as to the easiest route of access, or as to the extent of the lesion.

Intrarectal inspection may be accomplished by the use of any kind of a light to

which one has become accustomed, but as a means of diagnosis this method must always remain secondary to palpation; appearances are deceptive and objects which are totally different often bear a close resemblance to each other. It is impossible to recognize by the eye alone physical characteristics which distinguish innocent from malignant conditions. Often, too, the free bleeding obscures clear vision and puts a further limit to the investigation.

Wells<sup>2</sup> mentions the use of the cystoscope in examining the rectum. The patient is placed in the knee-chest position, with the abdomen relaxed. The cystoscope is easily introduced, the rectum washed clear and filled with water. By this means it is possible to note whether the malignant ulcer involves the whole circumference of the rectum or not.

Roentgentological examination of the rectum proper is not essential, because given a suitable position the entire organ is within reach of the examining finger and may also be inspected by direct vision. But in a certain number of persons proper sigmoidoscopy is impossible, and in order to enable one to differentiate organic obstructions of the gut from spasm or adhesions competent x-ray examination offers the only solution.

Section of a piece of suspected tissue is opposed because such incision may disseminate cancer cells into the blood or lymph circulation and spread the disease. It is really not needed in the diagnosis of cancer of the rectum except as a confirmatory proof in the doubtful cases in which one cannot make up his mind from the clinical findings alone whether he is dealing with malignancy or not.

#### References

- 1.—Kuttner, L.: *Med. Klinik*, Berlin, Sept. 17, 1922, p. 1201.
- 2.—Wells, Ernest A.: *Surg. Gyn. and Obs.*, Nov., 1920, p. 472.

# Surgical Seminar

Conducted by GUSTAVUS M. BLECH, M.D.

[Note: The Seminar is devoted entirely to the practical interests of surgeons. Problems and their discussions are solicited. Contributors must give their names but whenever desired these will not be published. Questions for this department should not exceed fifty words. Address all communications for the Seminar to Dr. G. M. Blech, 108 North State Street, Chicago.]

## Surgical Diagnostics

Complying with the expressed wishes of many Seminar readers, I shall present in serial form a rather free discussion of the means to arrive at surgical diagnoses. It must be understood that this discussion does not aim to replace standard textbooks, but is to be looked upon as a survey of the means at hand.

The diagnosis of any given surgical disease is a science rather than an art, as compared with surgical therapy. If this be correct, it follows that the personal element is of less importance than in operative therapy. One who studies the men who have earned reputations as surgeons will realize that one surgeon may be a master of his science and yet be a rather mediocre operator and again one beholds many a brilliant operator who, as a scientist, makes a very poor impression.

It is different with diagnosticians. The time to admire the "brilliant" diagnostician, who needs but to place his finger tips on an abdomen to pronounce his diagnostic verdict, has gone—never to return. On the other hand, the "nickle-in-the-slot" process does not lead anywhere, either.

We know of more than one popular surgeon who diagnoses a case something like this: A patient has his history taken by one or more assistants. He is then examined by a number of specialists, which includes a complete laboratory investigation. At the conclusion the patient is summoned before the throne of the chief, who verifies some of the physical findings and, basing his opinion on the written evidence before him, passes judgment.

Now let there be no misunderstanding that the above remark is presented in a derogatory sense, for it is not. There is no doubt that, where a number of capable men are grouped together, the head of the group has a perfect right to economize in

time and energy, and, as a general proposition, the diagnostic results are good, every precaution having been taken against error. The only thing that may be said against such a system is that the individual touch is lost and that the patient is handled as a "case" rather than a "sick human being," which circumstance, in the writer's opinion at least, occasionally militates against good therapy.

The writer, in his clinical work, has no group of collaborators available. In special cases special aid must be obtained, as one cannot be equipped to do all neurologic, serologic, pathologic and all other examinations, even if one had the time. Doubtless, the overwhelming majority of our readers are in about the same situation, and it is for the individual, general surgeon or even general practitioner of medicine that these lines have been penned.

I begin with the

## Anamnesis

When a patient first seeks a surgeon's sanctum, two psychic factors are present: A human being, suffering and filled with anxiety, who seeks material aid, on one side; and on the other a stronger fellow-man, expected to give that aid. The relation that will exist from that moment is still doubtful, depending on the mental make-up of the sufferer and on the psychic influence of the helper. Centuries of superstition have left their mark on the human races, which is less pronounced as education has torn the veil of mystery from supernaturalism. Between the simple-minded peasant from the hinterland, who comes to the physician overawed, much as his forefathers who consulted an "oracle," on one hand, and the scoffer and doubter, the "modernist" in "society," who has a sort of contempt for science—there are nuances enough to need a large-sized volume for adequate description.

The estimation of all this cannot be taught in textbooks, in colleges and certainly not in the Seminar—no more than one can teach when a handshake between two men represents the symbol of trust and confidence or of trickery and treachery. But your taking of the *anamnesis* gives you an opportunity to study your patient. Nine

times out of ten one can tell as soon as the anamnesis has been taken whether the patient is going to remain one's patient or whether the first visit is also to be the last.

What has the history to do with all this? Nothing—and everything. If you really care to remain in charge of the patient, the anamnesis gives you the opportunity to “subjugate” your client as your future subject, whom you can rule without fear of a revolution; or else that same opportunity will also tell you that you two are not in proper psychic accord, and then it is better to let some one else treat him.

Now as to the *modus operandi*. Patients even untutored ones, are quick to detect artificialities, and while a few hysterical women may lose their heads over the “charm” of Dr. A. or B., my advice is to be appreciative of the dignity of one's vocation. The great Nussbaum has said that he will be to his patients either the highest authority or nothing, and he knew whereof he spoke.

Let the patient tell his story of the past without interruption. Make notes if you wish, but do not interrupt. When the flow of words has ceased, when the patient has bared his soul to you, then only should you begin to sift the wheat from the chaff. This should follow a certain routine. You have it on your history card. You secure *personalia* (name, address, telephone number, occupation, social condition, references, age) by a few direct questions, and you continue to note the salient features of the past history which, as a rule, are vague when originally presented.

And now comes the taking of the clinical history, compared with which the physical examination is mere child's play.

The first rule is to be thorough. This takes time. It takes the writer about five minutes to make a physical examination for suspected gall stones, to cite an example, and perhaps to find nothing to hang a diagnosis on; but thirty minutes of questioning has resulted in a diagnosis, the correctness of which was eventually verified on the operating table.

The next rule is to attempt to get the necessary information to place the particular location and cause of the disease, at least tentatively. Neither the communicative nor the willing patients are schooled to furnish the required information, and one not infrequently encounters sullen people who meet the very man who is to aid them as if he were a detective.

A case will illustrate what we have in mind. A patient complains of toothache. The teeth appear normal on inspection and a complete dental radiograph shows absolutely normal conditions. The physician dismisses the patient after some antipyretic has failed, with the advice to seek a dentist's services. But the dentist is helpless. Another physician is consulted and he proceeds to take a proper history. This shows that the patient has lost weight recently. He has had bleeding from one of the nostrils. Naturally, this leads to a physical examination, with the result that a malignant tumor of the upper jaw is detected, which explains the neuralgic pains.

Of course, in emergencies, there is little time for all such details, but then we confront self-evident facts which dictate the proper therapy. Only when a profuse or repeated hemorrhage, beyond the ordinary experience, makes its appearance, will we make an inquiry into the familial history with reference to hemophilia.

The anamnesis and the clinical history taking do not differ particularly from the methods employed by internists. If one does not want to forget items it is best to adopt some standardized system. Those who do not care to provide elaborate blanks for each patient, may equip themselves with “reminders” and enter their records on a card or in a permanently bound record book, as they see fit.

(To be continued)

#### Discussion and Solution of Surgical Problem No. 4

*Recapitulation*—(See May issue, p. 340). A young shipping clerk, in fair health, awakens one morning to find his right knee swollen. Treatment for rheumatism proves ineffective. Another physician who has been consulted changes the diagnosis to that of a tuberculous arthritis and proposes aspiration and injections of iodoform emulsion. This treatment is refused, and the Seminar readers are called upon to handle the case.

The anamnesis shows little as the patient does not know his antecedents. While he had some physical work to do in his employment, he does not recall any direct or indirect injury of any kind. Outside of the diseases of childhood and an attack believed to have been influenza a year ago there is nothing noteworthy that may have any bearing on the present trouble.

Examination of the knee shows it to be much swollen, the covering skin being pur-

plish in color. The knee is not painful; pulse, respiration and temperature are normal and a general physical examination reveals nothing abnormal. The urine is normal on analysis. In order to determine the presence or absence of lues you withdraw blood from a vein at the elbow. The blood Wassermann test is reported the next day to be negative. The next day's physical examination reveals no change, the knee still being tense from fluid, but movements cause no pain. At the site where the needle was inserted for the Wassermann test is an ecchymosis about the size of a dollar. While the patient looks very pale, it is learned that he has appeared that way for a number of months. A differential blood count is not available.

The requirement calls for a differential diagnosis and the treatment indicated.

**Discussion by Brigadier General George Acheson, St. Martins, N. B., Canada**

I suggest that this young man is a hemophiliac and that the trouble in the knee is hemarthrosis. True, we are told that he has never shown signs of being a bleeder, but there is always a "first time."

The ecchymosis at the site of the puncture of the basilic vein tends to confirm this diagnosis. The fact that this swelling came on suddenly without trauma or any apparent cause, and was unattended by any of the usual signs of synovitis or arthritis, though the nature of the effusion is not disclosed, would lead one to strongly suspect hemarthrosis of hemophilic origin.

Should this diagnosis be correct, the only surgical treatment—if surgical it can be called—is complete rest for the joint until the swelling has disappeared, followed early by massage and passive movement.

Medical treatment consists in the administration of thymus gland, together with salts of calcium and magnesium. Horse serum has been used, but there is danger of anaphylaxis. The accompanying anemia calls for arsenic.

**Discussion by Dr. D. A. Herron, Alta, Iowa**

While the absence of a family history in this case renders the problem rather more difficult than would be the case if we had one, we can arrive at a diagnosis without it. I would, of course, be very much interested in knowing whether either one or both of his parents ever had purpura, hemophilia or angio-neurotic edema (Quincke's disease). The sudden onset speaks against tuberculosis and lues (Charcot's joint), and

this would hold good even in the face of a positive Wassermann reaction.

From the evidence as presented I should make a diagnosis of probable hemorrhage into the joint and possibly, though not probably, an angio-neurotic edema. The cause of the hemorrhage, while uncertain, is in all likelihood a purpura. It is rare for a hemophiliac to reach his ninth year of life without having betrayed evidence of the disease.

The advisability of a blood count, with particular reference to the clotting time, in this type of cases is indisputable.

No surgical therapy is indicated and certainly not aspiration of the joint.

Nonoperative therapy should consist of rest, diathermy and intense radiant heat. In a week, marked improvement should be evident. Calcium medication combined with applications of ultraviolet rays, the administration of some such preparation as fibrogen or thromboplastin, plus blood transfusion, should produce normal clotting.

**Discussion by Dr. H. O. Strosnider, St. Francisville, Mo.**

Exact diagnosis of a swollen knee with effusion requires a radiograph of the affected joint, a Wassermann test, a tuberculin test, aspiration of the fluid for culturing purposes and a differential blood count.

If all forms of malignancies and infections can be ruled out, simple synovitis suggests itself, which may be due to some trauma, pinching of the synovial folds, loose articular cartilage or loose bodies in the joint. Inflammatory processes not infrequently are occasioned by bacterial or chemical irritants in the circulation, while venous congestion or any condition that will hamper the venous flow will be responsible for articular disturbances.

The ecchymosis at the site of the puncture by a hypodermic needle I am inclined to ascribe to a venous condition in patients whose physical make-up is below par.

Some time since I had a man with what I believed was a simple, serous synovitis. The synovitis was apparently cured by the application of superheated air for one hour daily. As this patient had an effusion without pain I kept him under observation and in a few months my suspicion was confirmed, as it was then possible to diagnose intestinal tuberculosis.

With regard to the case of the problem, immobilization of the joint combined with fresh air, sunshine, radiant light or heat are directly indicated, but a personal ex-

amination seems essential in order to outline a course of medication.

**Discussion by Dr. B. B. Parker, Parker Hospital, Allerton, Iowa**

The absence of a familial history as well as of a differential bloodcount are handicaps and, therefore, render the problem all the more interesting.

One is struck at the very beginning with the impression that the knee joint represents merely a local manifestation of a constitutional condition, dictating the need of paying attention in that direction.

The data are in themselves rather insufficient for a diagnosis of hemophilia, but the painless and sudden development of an effusion (hemorrhagic?) into a joint, coupled with the ecchymosis produced by the puncture of the vein and the general picture of a coexisting anemia suggests very decidedly one of two things; hemophilia or Charcot's disease.

The absence of a clear history of trauma need not be accepted as conclusive that there was no trauma, for in the patients occupation slight traumata may occur without his noticing or paying attention to them. Any slight trauma may be immediately the cause of the knee effusion, if the individual happens to be a hemophiliac.

Charcot's disease must be considered because of its predilection for the knee, and with the evidence submitted it is impossible to rule out that affection with any degree of certainty. Here a blood test would have proved of considerable value, though it is recognized that one or more negative blood Wassermann's would not be absolute evidence one way or another. There still remains the therapeutic test.

Tuberculosis, acute inflammations and purpura hemorrhagica can be eliminated because of the sudden appearance of swelling, painlessness of the knee, absence of fever and free mobility of the joint.

To insert a trocar into a joint such as this is tantamount to courting disaster, and I see no indication or reason for surgical intervention.

Until by a therapeutic test a positive diagnostic decision can be made the hemorrhagic diathesis looms foremost and appropriate medicinal and hygienic measures are the only ones to be utilized.

**Discussion by Dr. I. Swain Irwin, Erie, Pa.**

There is no history of previous hemorrhages of traumatic origin, nevertheless the whole picture is that of a blood dyscrasia.

Accordingly the best plan to manage a case of this type is to put the limb at rest for at least forty-eight hours, to prevent further hemorrhages, then subject the knee to half-hour exposures to radiant heat or heated air. On alternate days low milliampere diathermy should be applied through the knee, each seance lasting not less than one-half and no more than one hour. Between treatments an elastic compression bandage will prove of benefit.

As medication I favor the administration of calcium lactate and some ferruginous preparation.

There is no indication for surgical interference unless one wants to call a transfusion of blood, which may eventually become necessary, a surgical procedure.

I have at present a hemophiliac under observation, who returns to me annually for what he is pleased to call rheumatism. His "rheumatism" manifests itself in either an ankle or a knee and with no more pain than can be ascribed to the pressure of the effusion. The treatment outlined above has proven very effective to reduce the affected joints to clinically normal conditions in a very short time.

**Discussion by Dr. Emil C. Junger, Soldier, Iowa**

His past history of being reared in an orphan asylum, where plenty of food is conspicuous by its absence, and the possibility that he was kept out of the sun more than necessary, suggests that, in addition to the purpuric evidence, there is a decided indication of the possibility of a future tuberculosis. His job, exposing him as it does to minor injuries and irritations of the lower extremities, is very likely to produce a tuberculous lesion in the cartilaginous portions of the affected bones.

The treatment here suggests itself; immobilization of the knee, fresh air, sunshine, hematinics, nourishing food, and if necessary change of climate.

Let him have plenty of recreation and congenial company but—no wife, for the present.

**Discussion by Dr. F. N. Richardson, Cleveland, Ohio**

To me your problem does not appeal as a surgical one at all. One need but look at the ecchymosis produced by the needle puncture and observe the purplish discoloration of the effused knee joint to obtain the definite impression that this patient has the earmarks of one suffering from some abnormal condition of the bloodvessels.



That this condition is due to some constitutional cause will require little argumentation.

We confront a dyscrasia of some sort and every circumstance mentioned in the problem points to it being of a hemorrhagic character.

In such cases surgery loses its right and rest, gentle massage, heat applied topically and general systemic medication appear the logical measures indicated.

**Discussion by Dr. John Clark,  
Latham, Kans.**

It seems to me that a diagnosis can be arrived at by direct exclusion. In the problem it is stated that no blood count was made for external reasons. What is the hidden meaning of this? Could anything definite be found by a blood count? I would have preferred a history of bleeding as more satisfactory to me in my diagnostic search, for this thing which the author was apparently on the lookout, happens in tender youth.

The Wassermann test, too, presents difficulties, since the puncture confirms the suspicion. It would have been better to aspirate the fluid from the joint for the Wassermann test, and a negative result would be diagnostically more satisfying.

I see nothing in the history that suggests a primary anemia and the circumstance of the young man having been brought up in an orphanage is mighty slender evidence for hemophilia or purpura hemorrhagica. We have here a history of a male who does not know of any bleeding in the past. The sudden appearance of the phenomena as described is rare indeed and as for the appearance of the patient, many indoor workers have pale countenances without being anemic.

We ought to admire the physician who suspected tuberculosis. We have no statement as to the condition of the capsule, nothing is said as to whether the temperature of both limbs was alike or different, and no mention is made of muscular atrophy. A mild form of tuberculosis could have existed for a long time without evidence of abscess formation.

The whole problem simmers down to this: no articular rheumatism, no trauma, no syphilis proven, no synovitis due to osteomyelitis. We do not know whether there is crepitus or osseous changes, but we do know that there is absence of pain, that the joint is not rigid and shows a bluish swelling.

The history does not suggest the presence of foreign bodies. A neuropathic joint is painless with advancing deformity but must be associated with tabes or syringomyelia. A beginning sarcoma can by no means be excluded.

We are inclined to accept the following situation: hemorrhagic effusion in a male who bleeds easily, all pressure leaving a bluish discoloration, and while the description is hard to fit into the scheme, this is due to its rarity in form rather than strangeness of pathology.

I should hesitate, in a case like this, to aspirate, to say nothing of severer surgical measures. I question the value of the study of the effusion and I have no faith in the x-rays helping us to clear up the diagnosis. While the patient appears to me to be a marked man, rest, good food and tonics will improve the condition.

**Editorial Comment**

I have been unable to publish all the discussions. Why cannot this be always so? Why cannot fifty alert readers come to be regular Seminar contributors? There is so much material available, and I have so many plans in view of making the Seminar a larger and more useful feature of CLINICAL MEDICINE that all it needs is demonstrated enthusiasm on the part of the readers. I get encomiums almost daily but I cannot grow fat on mere praises. I need the food of sustained interest.

When I presented the above problem, which, by the way, is a real case, I said to myself, "This is so simple that they will treat the problem with silence." Evidently I was more fortunate in the selection than I believed.

I have little to add. Please do not criticize the absence of all desired data. If that were given there would be a case report but not a problem.

The question arises, how comes it that I published in the Surgical Seminar a problem which the reader can easily see is not surgical in character. It is a surgical problem, because the effused joint looks surgical in character and it is up to the surgeon to recognize whether surgical therapy is indicated or not. It is a borderline case, or at the worst a medical case easily confounded as a surgical one. I am not compelled to restrict my problems to PURE surgical ones and, besides, such a policy would be misleading. In future a problem should be studied without bias or prejudice.

Now to the problem itself. The ecchymosis

on the arm speaks for a bleeder. If this were doubted, as it was by the physician who called me in to do an arthrotomy, all one has to do is to pinch a muscle, say, the abdominal wall, and you do not even have to make the coagulation test, which was fourteen minutes in this case. Of course, I could not tell you that before.

Hemophilia shows itself in boyhood—the male sex being singled out overwhelmingly—most often, but, as General Acheson says, there must be a beginning, and whether the patient had or did not have any hemophilic evidence as a young lad is uncertain. The patient did not know, and one is not going to throw out hemophilia on the ground that a poor orphan boy had no one to pay special attention to him. Maybe he saw black and blue spots galore but accepted them as a matter of course, as boys who fight and kick each other usually do.

That he is a male, that he is a young man and that he appears pale—these data, simple as they appear to the casual observer, fit into our diagnosis of hemophilia.

But the thing that is virtually pathognomonic is the suddenness of the effusion without sufficient trauma to rupture a blood vessel or produce a traumatic synovitis, the painlessness, the mobility and the bluish discoloration of the joint which speaks for a blood effusion.

While tuberculosis and the arthropathies, especially that due to syringomyelia, may, too, come without pain, the effusion is never bloody, not devoid of some pain or tenderness on motion of the joint and, besides, dependent on some evidence of the underlying disease.

I prescribe lemonades and fruit juices, on the general principle that they have vitamin value, rest calcium and very gentle massage. I see no reason for any other treatment for some time. The patient is doing very well, by the way.

I lost an operative fee but I am recompensed with having pleased many of my friends of the Seminar.

#### Surgical Error No. 3

A general surgeon performed a tonsillectomy on a young woman. The indication for the operation was proper. There was no constitutional or any other contraindication to the operation, the patient being in good health otherwise. Coagulation time—three minutes.

The operation was done by dissection and some snare apparatus—which particular one does not matter—and the entire tonsil

was removed. There was at once profuse hemorrhage. Compression was brought into play for sufficient time to check the flow, but as soon as it was removed the hemorrhage returned and this continued for some time, alarming the surgeon, who exposed and ligated the internal carotid, which, however, did not arrest the hemorrhage.

Another surgeon, who happened to be in the hospital at the time, condemned the operation, although undoubtedly well performed, and predicted cerebral disturbances, which later actually appeared.

*Requirement:* Wherein did the surgeon err?

What was the proper procedure in threatening hemorrhage?

(Note. There was no anatomic anomaly of the bloodvessels.)

#### Problem No. 6

The following problem is presented for diagnosis only and is based on a case sent in by Dr. R. P. Cummings, Conway, Ark. The case itself is very interesting as Dr. Cummings sent it, but, of course, we had to rearrange it somewhat to make it presentable as a surgical problem.

A married colored man, aged 30, father of three healthy children, with no personal or family history of interest, woke up during the night complaining of a weight in the lower abdomen, as if his bowels wanted to move. He had, however, no success when trying to defecate. After taking some saline laxatives he had a small bowel movement.

In spite of not feeling well the next morning he went to work, but on the way he became seriously ill from pain in the abdomen, which was "drawing him together." He was taken into a house, put to bed and was given household remedies for "cramps," which resulted in vomiting, without relief. A physician had to give him two hypodermics of morphine before he was eased enough to be carried to his own home.

The patient not being better, another physician was called in and pronounced the diagnosis to be gall stones, as contrasted with the first physician's diagnosis of acute appendicitis.

Dr. Cummings saw the patient eleven days after the first attack. He was slightly icteric, had sunken eyes, a pinched expression, a dry skin and was spitting up a small amount of frothy saliva every few minutes.

(Concluded on Page 507)

# Clinical Notes and Practical Suggestions

## A Personal Experience With Smallpox

THOSE of you who can recall events back to the year 1900 will remember an epidemic of smallpox, pretty well distributed over the United States. There were many physicians who doubted the authenticity of the reports, when it was announced that a certain person had smallpox, and would usually reply that it was chickenpox, or Cuban itch, etc.

I had never seen a case of smallpox that I recognized as such, and made my diagnosis as did some others, until my attention was called to smallpox through rumors and periodicals.

A short time after treating several of these cases, I began to feel sick, and thought I was taking influenza. I had severe pains in my muscles and bones, high fever, and headache, so I went to bed and took the ordinary influenza treatment. I had never been vaccinated. On the third day I was feeling pretty well. On the fourth day I began to feel an itching on the side of my nose, on my shoulder and on one side of my buttocks. On the fifth day there were three distinct hard nodules with pus, but they were so arranged that no one could notice them, as I had a mustache. As I was unable to recognize these as smallpox, I never admitted that I had had it. My wife and child who had not been vaccinated did not take it.

The smallpox had spread over the county, and some people were dying from it. The county officials were taking all the precautions to keep it in bounds, with little avail, and in that year had expended \$24,000.

When this was made known, many taxpayers began to object, and feared that if this continued it would bankrupt the county.

The County Commissioners and Board of Health then decided to build an isolation hospital, and have all these patients and suspects removed there, until they got well or were protected by vaccination, employing a resident physician by the year.

Three houses were built; one with ten good-sized rooms, for the afflicted; another

with eight rooms for those who were exposed; and a small one-room house for disinfecting.

The first physician that was employed did not like the work and gave it up. Then I got the job.

I had the county build me a residence near the hospital, and then had them make arrangements with the railroad company to furnish a special car, which people called the "pest car," to bring the patients to the hospital, as they all lived near the railroad. Those living further in the country were isolated at their homes under my instruction, and most of the time under my treatment.

When I got things in shape, a special engine was furnished to take the "pest car," with an attendant, where I directed, and to bring the patients immediately to the hospital; and I soon had the hospital full. It was kept full for nearly two years, and no patients were left at home, except a few who, because of their standing, could not be forced to come to the hospital.

The first year the complete cost of maintenance, including all expenses, was \$5,500.00; and the second year, \$3,500.00.

I studied my cases diligently and tried new remedies all the time I was there, trying to discover something new about smallpox, but there was no difference. The only thing I learned about it that I did not know was that if you were not vaccinated, you would take it if exposed, and it did not take much exposure either. Those who had been successfully vaccinated did not take it, and in a rare case when one did, it was very light, as in my case; yet I had many cases just as light in some that were not vaccinated. I had one patient who took it twice, about fifteen days apart. The doctor who reported this case told me he was not sure that the patient had smallpox, and wanted me to examine him before taking him to the hospital. I examined the patient and, as he had the hard, shotty nodules in the palms of his hands and feet, I said

that he had it. I sent him to the hospital, and in about ten days he was clear of all eruption and his skin was smooth, so I sent him home. In five days the doctor sent him back to me with instructions to cure my patients before discharging them. He was broken out just as badly and in the same places as he was the first time. I am wondering if it was a twin brother.

I had quite a time keeping indolent negroes away from the hospital. They wanted to see their wives, they said, and I came near to shooting several for insisting, and stealing their way in. There were many people who did not believe in isolation, and I had that to contend with, as many were insolent if you told them they were not allowed on the grounds.

I held the job for three and a half years. During the last six months there was not a case of smallpox in the county. I could have held the job for several years more, though there was no smallpox, but I had had troubles and narrow escapes, and thought I had better get out while I could.

Before the hospital was built, many physicians—any that had cases—were paid \$10.00 a day for walking up to within ten feet of a house and, having the patient come to the window or door, asking him how he felt and laying the medicine down. Either the patient or attendant came and got it when he left. That was not considered easy money until, at the end of the first year, the officials saw what it totaled, with no decline of the epidemic, and they began to think seriously.

In doing this work I made a number of enemies, and I had a number of exciting experiences, but I had no forebodings as I never went anywhere unless I was fully armed.

One night I was told by a boss that two negroes, in a shanty that was a gambling den, had smallpox and to take them to the hospital. Then he said, "Those niggers don't want to go, and you will have a hard time getting them, but they are running a gambling joint and we can't keep others away, and we want them away from here. It's a dangerous job; there are six other niggers in there and they will try to kill you, but I will sit down here on the railroad track and wait for you, and when I holler, 'Doc, are you there?' you answer me. If you don't, I will think they have killed you. You will have to walk a twelve-foot board, sixteen feet long, in order to get into the

house, and if you are not careful those niggers will 'sand bag' you as you go."

I said I would take the chance. I had a good Colt's revolver with a six-inch barrel, and could hit a ten-cent piece at fifteen steps, with not much aim.

When I reached the foot-board it was so dark I could hardly see it, and the end that rested in the door was about six feet off the ground. I thought to myself, "If they throw something at me I will fall only six feet, and, if not hit in the head, I will still have my gun to get away with. So I surveyed all my surroundings and convinced myself there was no one on the outside. Then I walked across the board, revolver in hand, and, as I reached the door, saw that it was open. I stopped and peered in every direction but could see no one. I opened the door of the next room and stood to one side with my revolver ready for a rush but none came. At the farther end of the room sat an old darkey by a tin lamp without any globe. I said, "Where are those men with smallpox? I am the man from the hospital and want to take them there where they can get proper treatment."

He replied, "There aint no men with smallpox in here. You can see for yourself I am the only person in here."

Just then I heard the boss call out, "Doc, are you there?"

I answered, "Yes, but there is nobody in this house except one old darkey. I have searched every corner."

He replied, "There is another room to that house; they are in it."

I leveled my gun at the old darkey and told him that if he didn't take me to that room at once he would drop dead right there. He pushed a key into a hole and opened a door. I was close behind him, and stopped by the door, surveyed every nook as well as I could before I entered, and told the boss I had found them.

J. M. RAPPOLD,

Bandera, Texas.

[If more people could have experiences like that so graphically portrayed by Dr. Rappold there would be fewer antivaccinationists. Most of the people who oppose this life-saving procedure have never seen a case of smallpox in their lives, and therefore they speak out of the abundance of their ignorance. Are there others who will tell of their personal experiences with smallpox and the value of vaccination?—ED.]

### METAPHEN LIQUID SOAP IN ERYSIPELAS

I wish to report my experience with metaphen liquid soap in two cases of facial erysipelas.

An old man had a "rash" on his cheek and nose, for which an ointment with a lanoline base was applied. When I was called the patient had a temperature of 102°F.; pulse 110. Characteristic facial erysipelas, rapidly spreading to the scalp.

To remove the lanoline I thought of liquid soap, and was about to add an antiseptic when I remembered that I had metaphen liquid soap in my office. This was swabbed on with cotton over the entire affected surface, and *allowed to remain* for 6 hours, when it was sponged off with tepid water, and another coat applied. This was repeated every 8 to 12 hours for three days.

Twenty-four hours after the first application there was marked improvement, and in three days only general after-treatment was necessary.

A second case received the same treatment, with an equally good result.

C. A. SCHLADERMUNDT,

Buffalo, N. Y.

### NEUROTIC BEHAVIOR

The term "neurotic behavior" describes abnormal conduct which falls short of being actually psychotic and is not conditioned by feeble-mindedness or psychopathy. The borderline between the two is uncertain, but the neurotic is always in touch with reality, has a clear grasp of the situation and knows there is something wrong with him. The psychotic is usually not in complete contact with his environment, has a more or less distorted understanding of what goes on about him, and seldom is aware of his own shortcomings.

The neurasthenic patient, the hysterical patient and the hypochondriac are perhaps the most familiar varieties of neurotics. These syndromes are well developed dramas of the emotions, staged with all the paraphernalia of a classic production, but for every one of these elaborated symptom complexes there are fragmentary reactions of a neurotic character in the lives of hundreds of people who are handicapped by a tendency to adopt subrational modes of behavior under stress and strain.

It is normal for everyone to become "emotional" at times, and for the degree

of this reaction to vary with the race, temperament, sex and physical condition, but there are quite well recognized causes for these normal reactions, and well established norms for their extent and duration. There are all gradations from normal expressions of fear, anger, jealousy and desire to their abnormal representation in subrational conduct. Also, there are all manner of unfortunately directed interests, sexual and self-preservative which must find outlet in subrational behavior because their possessor cannot give them open expression and maintain social position and self-respect. Psychoanalysis proper, proceeding to the very roots of the patient's emotional being, today seems to be indicated in the treatment of full-blown neuroses. Time will solve the question of its necessity and scope.

Before treatment is undertaken thorough histories must be obtained; first from relatives, preferably intelligent observers, and then from the patients themselves. The patients should be given opportunity to talk themselves out quite thoroughly, even if it takes a long time, because this is the beginning of their cure, and their spontaneous remarks frequently reveal important objectives for subsequent inquiry.

Physical examination must be adequate, with every effort to establish physical factors which influence the patient's behavior; parietic and arteriosclerotic changes in the brain may account for subrational behavior, as may hyperthyroidism, the menopause or a preceding lethargic encephalitis. Gout is a classical example of a physical disorder which precipitates outbursts of subrational conduct.

One should find out what the patients most desire and assist them to an understanding of their problems. Mere reassurance will not cure them, nor the advice to "forget it," or "use will power," and patients usually resent this attitude on the part of their physician. The patients should be allowed to help with their cure. If religious, they should take the matter up very seriously in their prayers. An honest appeal to Deity is always an attempt at self-analysis, coupled with a resolve to do better. Auto-suggestion and hypnotic suggestion are not desirable because they dispense with reason. Causes are not linked with effects in an honest attempt to understand the situation and find a remedy. Emotions which can be repressed one day may erupt beyond control the next.



The best way to secure peace of mind for the neurotic is to assist him to an understanding of the entire situation, so that he may realize how his disorder has come about and know what steps are to be taken to correct it. All these patients are prone to believe that their troubles are unique and quite mysterious. The surest and most permanent cure lies in a realization that their difficulties are of common origin with those of their fellows, and that they will disappear when they understand themselves and learn to deal with events in a rational manner.

CHARLES F. READ,

Chicago, Ill.

*From Bull. Chicago M. S.*

#### VEGETABLE ALKALOIDS VS. EPINEPHRIN

It is my purpose in this article to demonstrate the advantage of using the vegetable alkaloids rather than the cadaveric alkaloid, epinephrin, in several of the diseases named by various authorities that I have consulted, as well as opposing the indiscriminate and empirical use of this and other ptomaines.

Epinephrin, insulin and other glandular active principles are ptomaines or cadaveric alkaloids; and while many of the vegetable alkaloids are toxic, it must be admitted that all of the ptomaines are much more so.

I am not objecting to this class of drugs in well defined and appropriate cases, but to their indiscriminate use in many cases where they are positively contraindicated.

I object to their use, either subcutaneously or intravenously, for the reason that, once they are out of the hypodermic syringe, our control over them is lost; while administered by mouth we may have some hope of combating any untoward or unlooked for effect.

In this I am supported by several authorities, who show that epinephrin frequently produces untoward results.

The use of this preparation in the treatment of Addison's disease, while offering the greatest hope of relief of any measure at our disposal, still offers little, for these patients usually die quite promptly, in spite of all treatment.

In the paroxysms of asthma it is quite true that hypodermic injections of epinephrin frequently relieve the spasms of the bronchioles; but the same result can be obtained by the use of hyoscyamine, without the dangers attending the injection of a

ptomaine. I have used this drug in doses of 1/250 grain, placed under the tongue (where it is promptly absorbed from the buccal mucous membrane), and relief has been obtained in a large majority of cases.

In cases of shock and collapse, where many would use epinephrin, I have found that 1/250 grain of nitroglycerin, with 1/64 grain of strychnine arsenate, dissolved under the tongue, will produce marked and pleasing results within 10 to 15 minutes. This dose may be repeated after 15 to 30 minutes, if necessary.

I believe that epinephrin is contraindicated in all cases of fever, as it increases heart action and blood pressure. In these cases *aconitine* is the remedy of choice, because it quiets tumultuous heart action and equalizes the circulation.

In my opinion epinephrin should never be given by injection, but under the tongue for buccal absorption. In this way it can do little harm and may produce good results in some cases.

W. T. THACKERAY,

Fowlerton, Tex.

[We have never seen anything give such prompt relief from athmatic paroxysms as is afforded by a hypodermic injection of 3 to 10 minims of epinephrin, but are glad to pass along Dr. Thackeray's suggestions.]

Up to now this preparation has held its field of local vascular constriction against all comers, but now it looks as if a vegetable alkaloid (ephedrine) stood a good chance of displacing it even here.

Results from the oral administration of epinephrin have been very disappointing to most observers, but ephedrine promises to be almost as effective by mouth as it is by injection.

We shall be happy to have this discussion taken up by any who are interested.—Ed.]

#### SHALL PHARMACISTS DISTRIBUTE BIOLOGICALS?

Biological products are becoming a greater factor in the modern materia medica every day.

Millions of patients are being treated with these products daily and judging from the results achieved by this form of medication it is only in its infancy. Millions of dollars are being invested in research work in biological, chemical and pharmaceutical laboratories that represent an enormous capital investment.

Modern medicine not only strives to cure diseases, but even greater attention is being given to the subject of preventive medicine, as is shown by the extensive use of such biologicals as diphtheria toxin-antitoxin mixture for immunization against diphtheria and of authorized scarlet fever streptococcus toxin for active immunization against scarlet fever.

With all these advances in the science of medicine, little attention seems to have been given to the adequate and proper distribution of these important products.

It stands to reason that manufacturers of biologicals, chemicals and pharmaceuticals cannot maintain, in addition to their research and manufacturing laboratories, distributing depots in all parts of the country where physicians can be promptly and efficiently served, day or night.

The question therefore arises, who is the logical distributor for biological products and other medicaments and what should be required of him?

The proper storage, under refrigeration; the prompt delivery of all orders; the selection and carrying in stock of products only of the highest standards; the checking up of stocks of outdated potency, are only a few of the important duties that should devolve upon the distributor.

Summing up all the factors that enter into the distribution of biological products, ampules for medication and other medicaments, who is better qualified and who should be looked to as the logical distributor of these products other than the professional pharmacist? The physician of today is one of the principal guardians of the public health and the professional pharmacist is the other. It is most logical that there should be a closer bond of cooperation established between the medical and pharmaceutical professions if the wellbeing and health of the public at large are not to suffer.

Pharmacists are prepared to serve physicians as professional men and it is our belief that the medical fraternity will be served better, more efficiently and with a greater professional understanding if they will encourage pharmacists by looking to them as the logical distributors for biologicals, arsphenamines, insulin and medicaments of all kinds.

The question of what the pharmacist should charge for his services as a distributor is one which also deserves discussion. As a rule the professional pharmacist will

ask only a fair percentage of profit to cover his overhead charges, such as rent, heat, light, clerk hire, maintenance of refrigeration, etc., on his sales to physicians for products to be used in their offices or for personal use.

Too often, however, when patients ask what the cost will be, to them, of certain medicaments prescribed, physicians unintentionally make the error of quoting the price at which they themselves buy these same products for their own use. We know this is not the general practice but feel that in justice to the professional pharmacist and the service he renders, this erroneous practice should be brought to the attention of the medical fraternity.

We believe every physician will grant that the professional pharmacist is entitled to a legitimate margin of profit, in excess of his overhead charges, on sales he makes to the consuming public, whether such sales represent physicians prescriptions or other products.

As a matter of professional pride, from the standpoint of service and economics we offer this suggestion, and also in the hope that we may hear constructive suggestions and criticisms from our friends in the medical fraternity. A broad discussion of this problem in all its phases will be welcomed through the columns of this publication with the permission of its editor.

SAMUEL S. DWORKIN,

Chairman Committee on Biologicals, N. A. R. D. and Am. Pharm. Assn., New York, N. Y.

[This article opens once more the question of the dispensing physician and those who purchase certain remedies, such as the arsphenamine, bacterins, etc., for administration in the office.

The case for the pharmacist is here cogently presented, but we feel that the last word has not been said and we wish to encourage the discussion the author has invited.—ED.]

#### VACATIONING WITH A BABY

Vacation season is almost upon us with its problems of travel hygiene for the little ones. All the precautions observed while at home to guard against disease-producing germs should now be redoubled. Before starting on the trip it is well to have had the entire family, as well as the children, vaccinated for smallpox, and immunized against typhoid and diphtheria.

Many babies will join the Ford Caravan. For these the mothers will find powdered cow's milk a convenience as well as possessed of a greater certainty for cleanliness and good quality. It is easily prepared by mixing with boiled water according to the directions on the can. The resulting liquid has practically the same constituents as whole, fresh cow's milk and may be used for cooking, as well as for drinking, by the whole family. The water should be boiled first and allowed to cool somewhat before the milk mixture is made.

In fact, all water used while "gypsy" should be boiled, the possible exception being water taken from a source which is marked safe by the local health department. All water, boiled or pure, must be screened against insects and kept in clean containers.

Water may be boiled over the camp fire for five minutes, then covered and kept covered till used, or a solid-alcohol stove may be carried for this purpose. These are small, cheap and efficient.

If the baby is taking a formula, the bottle and nipple, spoon and mixing bowl, should be boiled for five minutes before making up the feeding. The hands should be thoroughly washed before preparing the milk. Unless a portable refrigerator is part of the outfit, it is better to make up only one or two bottles at a time. The most carefully assembled formulas may spoil in hot weather after being subjected to the vicissitudes of "auto gypsy."

Choosing a camp is a matter to be given serious consideration. Nowadays most of the camping grounds are sanitary, as well as sightly, and well advertised. Plan to stop at one of these hygienic places.

The regular routine of the baby's life should be maintained as at home. Make camp in time to put the baby to bed by 7 o'clock, bathed, in a fresh nightgown, and tucked away in his own airy sleeping nook, screened by fine mosquito netting. Even his bath water should be boiled.

The little baby is fed every three or four hours by the clock. Four regular meals are given to the older baby. A well-balanced daily ration contains a cereal (cooked if possible), at least one fresh, green vegetable, fruit (until after his second summer only stewed fruit is given the baby), and a pint to a quart of milk. A simple sweet may conclude the heavy meal of the day. Nothing is given between meals.

Come into camp provided with fresh, green vegetables, butter, eggs and fruit;

the food supply at the camps is usually limited and expensive. Vegetables, fruit, butter and eggs are often for sale along the road. If one carries a refrigerator, milk and meat are safely transported if they are obtained at clean stores. Buy milk only in bottles, and boil it for five minutes if there is any question as to its purity.

If camp is to be made for any length of time, the toddlers and runabouts should be somehow fenced in to play in their own safe place, far away from the campfire or stove, and treacherous or appealing bodies of water.

In the final analysis it is good, clean food, fresh air, quiet and regularity of habits that insures for your baby the best possible resistance to the disturbing and enervating effects of hot weather.—U. S. CHILDREN'S BUREAU.

#### HEALTH SLOGANS

He who eats cabbage has a good head.

Open your windows and throw out your chest.

Eat 18 carrot soup.

Eat fish and watch the scales.

Take your daily ride along the milky way.

A tooth brush in time will save many a dime.

The road to wealth is paved with health.

Say it with vegetables.

—Michigan Out-of-Doors.

#### LETHARGIC ENCEPHALITIS\*

In dealing with organic diseases of the nervous system we must: (1) accumulate all data bearing upon the case; (2) localize the lesion; and (3) decide the nature and cause of the disease.

*History:* Here we have a young man, 29 years old, who, six years ago, had an attack of an acute febrile disease, with chills, fever and sweats and pronounced apathy or somnolence. There was a rather marked leucocytosis. He recovered from the acute attack, but six months later he began to develop neurological symptoms, which gradually became worse.

*Present Condition:* As we look at this patient we see that he stands in a stooped position with his forearms flexed and ad-

\*Abstract of a clinical lecture delivered by Dr. Lewellys F. Barker, of Baltimore, at the meeting of the A.M.A. at Dallas, Tex., April, 1926.)

ducted. His right thumb and forefinger are approximated and a rather slow tremor causes them to rub against each other. This is known as the "pill-rolling tremor."

He sits or stands almost without movement—like a statue—except for this tremor we have mentioned. His face is like a mask; the lines of expression are erased and there are no muscular movements indicating the play of thought or emotion. His eyes and mouth are fixedly open and he drools, giving him an idiotic expression.

He speaks slowly and laboriously (and not very intelligibly) in a low and monotonous tone, and tells me that he has difficulty in chewing and swallowing.

When he walks his gait is stiff and wooden and his feet apart. He continues to hold his forearms flexed and, as he proceeds, his steps become shorter and more rapid (festination). He says it is easier to run up or down stairs than it is to walk on the level.

When he writes he does so with difficulty and the letters are somewhat shaky and so minute that one almost needs a magnifying glass to read them (micrographia).

In spite of his idiotic expression his answers to various questions indicate that his mind is keen and alert. There is no disturbance of sensation anywhere.

Examination shows that his deep reflexes (achilles, knee and elbow jerks) are active but not much exaggerated. His muscles are rigid and his movements slow and stiff; but there is no muscular atrophy nor fibrillary twitching. Babinsky's sign is negative.

*Localization:* We have no disturbance of the mind, the psyche or the sensorium, so we know the lesion must be in the motor mechanism.

Two neurons are concerned in motion; the upper one has its cells in the cerebral cortex and connects with the cells in the anterior horns of the spinal cord (the lower neurons), whose axis cylinders innervate the muscles. If the lower motor neuron is affected we have loss of the reflexes and atrophy of the muscles (as in anterior poliomyelitis, or infantile paralysis); when the upper neuron is involved it results in muscular spasticity without atrophy, slowed movements and active or exaggerated reflexes.

Our lesion is, therefore, in the *extrapyramidal motor tract*, and the very general distribution of the symptoms, with disturbance of the automatisms of speaking, chewing, swallowing and mimicry, locates it in the

neighborhood of the corpus striatum and the globus pallidus.

*Diagnosis:* What disease can produce this syndrome? Here we have an acute infection, in early life (at 23 years), followed, some time later, by the appearance of progressive neurological symptoms resembling those of Parkinson's disease.

The acute attack resembled one of influenza, but leucocytosis was present, which does not occur in that disease.

Chorea usually occurs earlier in life and Parkinson's disease later. Neither of these has an acute onset.

When we have the story of an acute disease in early life, followed, later, by signs of extensive involvement of the upper motor neurons, we are dealing with a case of *lethargic encephalitis*.

*Treatment—of acute attack:* Complete rest in bed for a long time, with protection from all physical, mental and psychic shocks and disturbances of all kinds. If the symptoms are severe, *lumbar puncture* should be performed and repeated as necessary. Other than this the treatment is symptomatic.

*Of the postencephalitic syndrome:*

Every possible measure should be taken to keep up the patient's general health and condition. The distressing symptoms are best relieved by *hyoscine hydrobromide*, beginning with 1/400 grain, 2 or 3 times a day, and *gradually and carefully* increasing the dose to 1/50 grain, or any point below this where untoward symptoms appear. This may be continued indefinitely, with occasional intermissions if indicated. The *drooling* may be controlled by *x-raying the parotids*, on one or both sides, to check the salivary secretion.

G. B. L.

#### ARSENIC AND IRON IN LETHARGIC ENCEPHALITIS (?)

In 1917 a "new disease" developed in England and France, according to the Proceedings of The Royal Medical Society (1919), which was identified as "Epidemic (Lethargic) Encephalitis," and which became so prevalent as to excite serious concern in that august body at that sitting. It will be remembered, however, that Drs. Capps and Moody gave us quite an exhaustive article on this identical disease in the *J. A. M. A.* in 1916, and also that, about this time, Dr. Crookshank announced that similar epidemics of this disease had been recorded in medical literature throughout

the past 450 years, and that each succeeding epidemic was described as "new!"

Strumpell practically bulks the three diseases: epidemic poliomyelitis, "sleeping sickness," and epidemic encephalitis, under one essential identity, and observes that it follows closely upon epidemics of "grip" and influenza.

Close observation will detect some symptoms of this malady in a surprisingly large percentage of influenza convalescents, especially those in middle life. Moreover, it presents itself in such varied degrees of severity and shades of symptomatology as to be perplexing to the diagnostician. Some cases reveal, besides the "lethargy," various shades of weakened memory, slow cerebration and mental apathy. In fact, many of the minor symptoms of cerebral disturbance are manifested, extending over prolonged periods of time, with little or no appreciable improvement in some, and progressive tendencies, slow and insidious, in others.

In chronic cases of this sort (of more than a year's duration), showing a pronounced anemia with deficient hemoglobin and no evidence of active inflammatory conditions, I have successfully employed intravenous injections of  $2\frac{1}{2}$  grains of dimethyl-arsenate and  $1\frac{1}{2}$  grains of ferri chloride, put up in ampules in 5 cc. of solution (or double these quantities in 10 cc. ampules). These injections are given at intervals of from 4 to 7 days and have produced gratifying results in the four cases in which I have used them.

Athens, Tenn.

L. W. SPRADLING,

[While we feel, in the absence of more detailed reports of signs and symptoms, that the diagnosis of lethargic encephalitis in these cases is not wholly warranted, the article is, none the less, interesting.

We all know that conditions of prostration, amounting sometimes to an actual psychoneurosis, frequently follow acute infectious diseases, especially influenza; and many of us have seen pleasing results follow the parenteral administration of various compounds of arsenic. If the patient is anemic, the addition of iron is logical. If he is especially asthenic, strychnine may also be added with profit.

Such a treatment as this is worth trying on your cases of postinfectious psychoneuroses, whether you think they had encephalitis or not.—ED.]

If you wish to learn the highest truth you must begin with the alphabet.—*Japanese Proverb.*

### CONSIDER THE HEN

*Did You Ever Give a Thought to This?*

That hard times mean nothing to a hen? She keeps on digging worms and laying eggs, regardless of what the newspapers say about conditions. If the ground is hard, she scratches harder. If it is dry, she digs deeper. If she strikes a rock, she works around it.

But always she digs up worms and turns them into hard-shelled profits as well as tender broilers.

Did you ever see a pessimistic hen?

Did you ever know of one starving to death waiting for worms to dig themselves to the surface?

Did you ever hear one cackle because times were hard?

Not on your life. She saves her breath for digging and her cackle for eggs.—*Canadian National Railways Magazine.*

### DIMINISHING NUMBER OF DOCTORS IN THE RURAL DISTRICTS\*

During the last few years articles have been published in medical journals and discussions have occurred in medical circles concerning the diminishing number of graduates from the regular medical schools who become country doctors and general practitioners.

To remedy this it has been suggested that the premedical requirements be reduced and the period of instruction in the medical schools be shortened. This plan would undoubtedly increase the number of medical graduates, but graduates of an inferior quality. So much is granted. But the remedy fails in that it presupposes that these poorly-trained medical graduates will migrate to the rural communities or stay there after locating.

The underlying thought is that the best doctors live in the cities and only the best can survive there, while the boobies in the rural districts do not know a good physician from a poor one, and that any kind of doctor can survive in such a place.

As a matter of fact, conditions are just the reverse. In large cities there is a group of physicians and surgeons of outstanding ability who gain their eminent position by hard and conscientious work. Then there is the group of younger men of the same type striving for a place in the sun by the same route. These two groups are a credit to the medical profession. But there is an-

\*Reprinted from *M. J. & Rec.* for March 17, 1926.



other group which varies in number according to the size of the city, the larger city having the greater number. This group is made up of poorly trained, lazy, ignorant and careless medical men, fakers, quacks, and charlatans. A city the size of New York is filled with such men practicing the healing arts and reaping a good financial harvest.

Why can men of the last class thrive in a large city and why do they usually starve in rural districts? Simply because in a large city there is no one to check up on their mistakes; they and their work are lost in the crowd; the pitiless light of publicity does not shine upon their ignorance and their mistakes are buried. In large cities a gift of gab, polished manner, fine offices, the right location and a small amount of ability will carry a physician a long way towards financial success as a practitioner. In the city a quack can always call in a consultant from the first two groups or he can send the patient to a hospital and thereby clear his own skirts and cover up his ignorance.

But the practice of the healing arts in a rural district or small town is quite different. A doctor may look the part and have good offices, on the right street, but if his results are poor he is through.

A rural practitioner must be physically strong and willing to travel long distances day or night, winter or summer, over rough roads. He must be self-reliant, for there is no chance to call in a consultant, no hospital to rush to for aid, nothing but his own skill, ingenuity and nerve to take him through the worst emergencies with the eyes of relatives and often of the whole town upon every move.

In the country a patient is not a case, but a personality, a friend, neighbor or acquaintance. Everyone knows everyone else. If Baby Jones cuts a tooth, it is known; if Mrs. Jones skips a menstrual period it may be a subject of remark and conjecture; if Mr. Jones has a pain or an ache it is a thing of interest and open to general discussion; not only is the name of the doctor in attendance known, but everything he says and does is remembered for future mastication and digestion. If Doctor So-and-So treats a case differently from Doctor So-and-So of the next town, and, above all, if the results are different, then the fat is in the fire.

In a factory community the compensation commissioner's office is the dispenser of

medical news. If the doctor happens to get a poor result in a case that comes under the Workmen's Compensation laws then there is a general airing of the subject by the commissioner, the employer, the insurance companies, the retained lawyers and opposing doctors. The niceties of professional ethics play no part in such proceedings, the opposing doctors often taking malicious delight in damaging the reputation of their fellow practitioners. Choice tidbits find their way from such courts, supplying juicy morsels for the local newspapers.

Probably the most potent factors in undermining the rural doctor's reputation are the petty jealousies, sly remarks and innuendoes of the rival physicians themselves.

No poorly trained doctor can survive this constant gossiping, bickering, and merciless publicity, comparison and criticism. It is trying to the patience of the rural doctor, but it keeps him very alert, makes him cautious in what he says and does, and, above all, it makes him study the recent medical literature and sends him off frequently to visit the leading medical centers.

Rural people may not have the external polish of the city dweller, but they have good common sense and are frequently well informed on medical matters. They have strong likes and dislikes, know what they want and whether they are getting it. It takes a hard shelled quack to live in such a community with a record of many glaring mistakes. It is much easier to move to the city and hide in the crowd.

Rural districts are losing their doctors not because there is a general scarcity of physicians but for the following reasons:

- 1.—They demand a higher type of physician than the average city practitioner and expect to pay less for the service.

- 2.—A country doctor has a hard and strenuous life compared to the easy office life in the city.

- 3.—Country life offers very few of the refinements that are enjoyed in the city.

- 4.—Rural districts want a local physician for only the emergency calls and these are too few in number to support an average physician. The ubiquitous Ford makes it possible to run the chronic and subacute cases to the neighboring city. No matter how much ability the local physician may have, still a certain percentage of the people will think that the distant doctor is the best, just as the cow thinks the grass in the adjoining pasture is the greenest.

By lowering the medical requirements an irreparable blemish will be placed upon the medical profession without accomplishing the desired result.

If small communities need a doctor and they persist in demanding a good one, then they will have to offer suitable inducements to attract such a man. This can best be done by the community guaranteeing a certain income with a chance of making more.

CHARLES L. LARKIN,

Waterbury, Conn.

### PROMISE YOURSELF

To be so strong that nothing can disturb your peace of mind.

To talk health, happiness and prosperity to every person that you meet.

To make all your friends feel that there is something in them.

To look on the sunny side of everything and make your optimism come true.

To think only of the best, to work only for the best, and to expect only the best.

To be just as enthusiastic about success of others as you are about your own.

To forget the mistakes of the past and press on to the greater achievements of the future.

To wear a cheerful countenance at all times and have a smile ready for every living creature you meet.

To give so much time to the improvement of yourself that you have no time to criticize others.

To be too large for worry, too noble for anger, too strong for fear, and too happy to permit the presence of trouble.

To think well of yourself and to proclaim this fact to the world—not in loud words, but in great deeds.

To live in the faith that the world is on your side so long as you are true to the best that is in you.

Before speaking think carefully whether what you are going to say is true, kind and helpful; if it has not those three qualities do not say it.—EXCHANGE.

### LIFE

A definition of life that ought to be interesting to our physicist friends and is pertinent from my viewpoint is:

"To be; to do; to do without; to depart."

It may be true that this little definition has been understood as a cynical gibe or literary quirk—a capricious speech rather than a serious appreciation—but it may

really be considered as a fair statement of a natural fact and a fair choice, if a choice has to be made, of the most essential and specific among the many faces and facets of this bulky subject.

If they will accept this definition I am sure that our friends, Dr. Gage and Mr. Redfield (See *CLINICAL MEDICINE*, 1925, pages 88, 386, 27, 146 and 368), will agree that, as an explanation of life, any possible showing of physics or affinities or electric phenomena will be hopelessly inadequate.

Motion of any sort, can hardly be concerned with more than one of the four aspects of life that are given here, and I object to describing any of the functions of life in terms of motion or in terms of energy, if by energy is meant physical energy.

I would analyse life—subdivide life—and name eight activities that are common to plants and animals, which are not at all related to anything that is known in the world of physics or in the world of chemistry.

I can agree that every living thing is dependent upon its physique, and I can agree that behavior is contingent upon the presence of appropriate chemical elements; but I cannot agree that an organism does what it is compelled to do by reason of its physical and chemical structure.

Here are eight behaviors: Sensitiveness; Irritability; Breathing; Feeding; Metabolism; Self-defense; Growth by individuals; Growth by numbers. And the greatest of these is growth. Each and every one of these activities has its origin within the organism; no one can be accounted for as a response to any physical or chemical cause in its environment.

I believe that it is possible to be scientific and at the same time to be religious. In order to make scientific learning agree with other things that we know we have only to realize that purpose in structure may be as well identified in the egg as it is in the adult. We may, if we try, read purpose in the chromosome as well as in the arm or in the eye.

I like to think of the eye as one of a succession of means by which the contact of the individual with his environment has been extended.

I like to think of the arm as an organ of will.

I like to think of mitosis as a change from fission that marks the beginning of a new purpose in nature, the reproduction for

quality instead of reproduction for quantity.

Let me, in turn, ask Mr. Redfield for a definition of science. And let me ask for a definition that will relate the arts and sciences in such fashion as will serve for the artist as well as for the artisan.

JAMES JOHNSTON,

Los Angeles, Cal.

[This very thoughtful and stimulating little paper will, we hope, give rise to much comment. It would be good for us all if we did more real, hard *thinking* along such lines.

There is a constantly growing school of students who believe that function is not the outcome of structure, but the reverse; that we do not see because we have eyes, but that it became necessary for us to see in order that we might deal adequately with our environment and that, in response to the urgency of this need, we developed eyes. The same idea follows throughout the whole field of human anatomy and physiology, and, in fact, throughout all nature.

We feel that Dr. Johnston has laid hold of a fundamental, vital and extremely profitable line of thought and has been very successful in putting some deep truths into simple language.—Ed.]

### PLAY

When Ivor Griffith, clinical chemist and serologist at the Stetson Hospital of Philadelphia, was asked what he meant by play, he answered, "Well, isn't play work without worry, task without friction, exercise without exhaustion—a gripeless laxative for mental and spiritual constipation?" Now tell us what your definition is.—*Patchwork*.

### MISERS ALL

Civilized man, hemmed in by customs, leading too often a sedentary life and eating, usually, not wisely but too well, builds and stores within himself poisons which eventually weaken his system, stiffen his elasticity and enervate his vitality.

A writer has recently said: "There are people, and they are many, but not a few unconscious delinquents, who hoard their feces as a miser hoards his gold. A certain amount is daily and laboriously given to the world but, in comparison to what remains behind, the amount is mean, physiologically insufficient and therapeutically ineffectual. When young, these people carry

their avarice upon their earthy, oily and pimply faces. In middle age, they become anemic, scant of breath, exiguous of skin and abdominally opulent. Old age they never reach; or, reaching it, they afford examples of the slippered, petulant pantaloons whom Shakespeare has rendered classical."

Habits are early formed, the graduation from the diaper to the *pot-de-chambre* is usually attended by discouragements against a too frequent use of the latter. Then comes the promotion to the water-closet; high on this throne he swings his little legs, fearful lest a backward fall would land him in the seemingly bottomless pit of oblivion. The normal crouching attitude, which tensifies the abdominal muscles is lacking, the pressure of the upper legs against the abdominal wall is lost, and so the straining to accomplish the necessary function becomes irksome. No wonder that he dreads the ordeal and avoids it whenever he can find a chance.

Then come the school-days, when boys are not encouraged to leave the room, and girls are discouraged, by being taught to control these feelings until some more convenient time, which alas may mean until another day.

The habit of waiting for some more convenient season thus grows, and on reaching man's estate, we find not only the constipated victim but the semi-constipated one as well. The burdens of the day are not lightened by the load carried in the colon and the poisons emanating therefrom are absorbed only to give rise to more or less serious manifestations, varying from a feeling of depression and even headaches, to the more serious pathological symptoms of autointoxication.

An English writer, advocating two daily movements instead of the usually so-called "sufficient" one, says: "Such, no doubt, represents the occasional attainable ideal to the man who pays his homage to Cloacina but once a day. But the man who knows, as an ideal at once attainable and workable, solicits the goddess at least twice daily, and careful though he be of the nature of his matutinal offering, it is to the vespertinal that he attaches the major importance. Then, freed from the press and distress which pursue him by day, he learns to lay his willing latria leisurely, leniently and lavishly at her gracious feet."

To accomplish this desideratum, habits must be overcome and aid must be sought. The simple oiling of the ways, according

to the gospel of Arbuthnot Lane, does not remove the poisons that exist in the debris clinging to the villi intestinales. A thorough cleansing is essential not only at the beginning of the treatment, but this should be continued as the exigencies require until the proper habit is established. Writers agree that castor oil is one of the best of the simple purgatives, and is used when a free evacuation of the bowels is indicated or when only a laxative action is desired. Its use is indicated in all these cases of constipation and semi-constipation, and at first given in small doses in the afternoon in order that the evening evacuation may be better accomplished.

No man is more surely, and to the seeing eye, more obviously constipated than the man who lives in the "Fool's Paradise" of a small daily evacuation. Of town dwellers and sedentary liverers, there is not one in ten who does not require the aid of laxatives, while Bishop gives especial prominence to the effect of serial doses of castor oil in the treatment of arteriosclerosis.—Reprinted from *Pharmaceutical Advance*.

#### INDEPENDENCE AND PROMISES

Some parents greatly fear that their children will get hurt (which, by the way, is not an unreasonable fear in the crowded tenement sections) or that they will associate with children of undesirable neighbors and perhaps pick up profane or obscene language. Even so, it may be better to take a chance than to cripple a child's life by allowing him no opportunities to learn independence and develop initiative. The child who is closely tied to mother's apron strings is deprived of all chance of really learning how to live with his neighbors. When the time comes to break the home ties and enter school he is lacking in strength, courage, and resourcefulness. This lack may handicap him through life.

Very early in life the child must learn that things cannot be his simply because he desires them. Do not try to give him everything he demands or wishes; he must develop the habit of foregoing certain of his wants, of giving when he would like to take, and of dividing and sharing his toys. He will not understand why he should do these things, but even a little child can appreciate that such acts bring approbation and praise and make other people happy. In this way he will grow to manhood with courage to face the disappointments and failures of everyday life.

Always avoid bribing and do not make promises which you know you cannot or do not intend to keep. So often we hear, "Now, Johnny, be a good boy and mother will buy lots of candy," or "Do this and mother will give you a penny." Soon Johnny will no longer be satisfied with one penny, and you must give him two and then three. A child with a little determination can easily work this method to his advantage. Or again, if a reward has been promised and the little girl or boy has made a great effort to do as asked, do you carelessly disregard the just demand for the reward?

Threatening a child is a common method of setting out to obtain control. It is, however, useless and inexcusable. The simple statement of what will follow if a child persists in disobeying cannot be considered a threat if the promised results really follow. But many parents indulge in meaningless threats—"Be good or the doctor will cut your tongue out," "Stop or I'll go for the policeman," "Be quiet or I'll lick you," or "The old man with the bag picks up little girls who don't mind their mothers, and they never come home again"—these and many others are in everyday use, with one of two results; either the child is controlled by terror, which may have a far deeper and more disastrous effect than is apparent, or he senses the fact that none of the promised happenings takes place and develops an utter disregard for them. Either result is unsatisfactory and should never be brought about.

D. A. THOM,

Boston, Mass.

#### WE SHOULD LIVE 120 YEARS

The average man who has been well fed all his life and well taken care of is fully developed at about 24 years of age. Say he lives to be 70. That is about three times the time it takes him to grow up.

A horse is fully developed between his fifth and sixth years. He lives, with proper care, to between twenty-five and thirty years. About five times the time he takes to grow up.

Go right through all the animals; you will find that all live at least five times the time it takes to grow to their fullest development. Except man.

There was a day—only a few generations back—when the second largest city in France had not one man or woman past fifty years of age.

Sewage ran through the open streets and into the wells. Plagues occasionally killed half of all the people. And regularly, it killed them before half of their natural life had passed.

Health sense today is being applied by the people themselves. See how much they get out-of-doors; the popularity, not always deserved, of health foods and drinks; the demand for pure water supplies, milk, meats and foods generally; and the legislation to safeguard the worker.

There is coming a keen sense of enjoyment of all life's activities. William James once said, "simply to live, breathe and move should be a delight."

The thoroughly healthy person is full of optimism, and when middle life is reached, his vital surplus has not been used up. He follows that sane formula of living: be clean, be moderate in all things and avoid that which is harmful and unwholesome.

Then work becomes play and the lure of life seems to turn from dull gray to the bright tints of well-remembered childhood. The life span will extend soon to five-fold the time of full development.—*Northwestern Health Journal*.

#### A SAMPLE DAY'S MENU FOR THE OVERWEIGHT EXPECTANT MOTHER

Here is a menu for the overweight woman during pregnancy. This menu yields 2,000 calories daily, as compared with 3,000 necessary for the average, and 4,000 for the underweight woman:

##### *Breakfast*

RAW FRUIT: One-half grapefruit or whole orange.

BREAD AND BUTTER: One slice of whole-wheat or graham toast with 1 pat of butter.

MILK: One cup of cocoa made with whole milk.

##### *10 A. M. Luncheon*

MILK: One glass of whole milk.

##### *Dinner*

MEAT, FISH, OR EGG: One beef ball, or small serving of fish.

GREEN VEGETABLE: Creamed spinach.

BREAD AND BUTTER: One slice of whole-wheat or graham bread with 1 pat of butter.

DESSERT: Baked custard made with whole milk.

#### *Supper or Luncheon*

SALAD: Raw-vegetable and nut salad on lettuce.

BREAD AND BUTTER: Two date bran muffins with one-half pat of butter.

COOKED FRUIT: Baked apple with whole milk.

MILK: One glass of whole milk.

DOROTHY REED MENDENHALL,  
Children's Bureau, Dept. of Labor,  
Washington, D. C.

#### DIET AND HEALTH

Our daily diet largely determines our health. The many ailments, the lack of enthusiasm and the failures of the sick may in many cases be traced to faulty food habits.

A typical illustration of this is in the case of two brothers, the elder being 8 years old and weighing 33 pounds, while his younger brother, 3 years of age, weighs 29 pounds. The elder brother did not like milk, bread, butter, fish or meat, and washed his food down with liquids. He was allowed to sit at the table and play with his food and his mother says he is "irritable and cranky." The younger brother, on the other hand, is a strong, good natured and happy boy.—*Bull. Chicago Municip Tuberc. San.*

#### DEALING WITH THE IRREGULARS

There are just two ways of combating the pathies and isms and other vagaries of the sort:

1.—Have laws passed in each state providing that, before an applicant to practice any kind of treatment can be permitted to come up for examination, he must show that he has an accredited high school diploma, has had two years in a college of pre-medics, and a diploma from an accredited school requiring a four-year course, covering anatomy, physiology, chemistry, histology, pathology, bacteriology, diagnosis, surgery, gynecology, obstetrics, hygiene and State medicine, medical jurisprudence and toxicology, and has had one year internship in an accredited hospital.

2.—By all medical colleges establishing a chair for the teaching of osteopathy, chiropractic, sanipractic, naprapathy and any other form of treatment that may come out, so that the graduate may be in position to meet these irregulars on their own ground.

If either of these courses were adopted those schools would soon cease to exist.



Our course of action depends upon which method of attacking the irregulars is to be adopted. If the legislation route is considered the better, then the county and state organizations should keep after the senators and representatives in their respective states until laws are passed making those preliminary, professional and hospital requirements necessary before an examination can be taken by any one.

If, on the other hand, the inclusion of irregular methods of treatment in the curriculum of the regular school is thought best, the pressure would have to be brought upon those at the heads of the faculties of the medical schools to incorporate the teaching of those methods in their courses. The main obstacle to this is the fact that there is so much other necessary material to be taught that conservative faculties would hesitate to devote the time to it, particularly as regular medical colleges have always ignored anything that was not considered scientific and rational, and it is questionable whether they could be induced to equip their students with pseudo-scientific teachings for purely economic purposes, or to overcome an antagonist.

Much can be done by county and state medical societies in combating these parasitic creations, if they have the right kind of members, and will get down to business and do it. A publicity fund can be started, and, if each member will contribute a few dollars a month, practically every one of these irregulars could be put in a position where they would hunt other fields.

We have every advantage over them, in numbers, and consequently in money to be spent in publicity, and surely in every local society there should be men mentally equipped to cope with anything they can produce. This has been done in some communities where physicians have united for the purpose. The public would then become educated to look upon these people as a class endeavoring to obtain money under false pretences, and the medical profession

would be assuming the role which it should assume—that of protecting the public against frauds posing as benefactors.

G. M. RUSSELL,

Billings, Montana.

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#### ACONITINE IN FRONTAL SINUSITIS

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Dr. C. W. C. was attacked with severe pain over the left frontal bone, left eye and left side of nose, all denoting obstruction of the duct from the frontal sinus to the nose. "Classical" treatment was instituted, consisting of the local application, through the nostril, of a solution of cocaine and epinephrin, followed ten minutes later with ichthycl; this treatment was continued for three days without result.

On the third day, the regular attendant consenting, I administered six doses of aconitine, 1/800 grain each, at fifteen-minute intervals. When this was done the patient felt sleepy and was left for the night. During the night an explosion occurred through the left nostril, with the expulsion of a quantity of bloody mucus, after which sleep was resumed. In the morning, aside from some slight soreness over the forehead, there were no other symptoms and the case was discharged as cured.

W. T. THACKERAY,

Fowlerton, Texas.

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#### SURGICAL SEMINAR

(Concluded from Page 493)

The abdomen was distended from the umbilicus downward, with a ridge in the center extending half way from the pubes to the umbilicus. As there was dulness on percussion a distended bladder was suspected and the bladder was catheterized. Eight ounces of urine were obtained, but the distention remained as a hard and tense swelling.

Temperature 99°F.; pulse 90; respiration 20. Tongue coated. Urine negative. Heart and lungs normal.

# The Leisure Hour

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Conducted by GEORGE H. CANDLER, M.D.

## A Prayer

THOU, GOD, who showest the terror of Thy power  
In rolling thunders and the dreadful hour;  
When crashing seas o'erwhelm the vessel frail  
And mighty trees are riven by the gale,  
Baptize me with the glory of Thy might;  
Nerve heart and arm with will and strength to fight.

Yet Thou art not the God of power alone.  
Beauty and joy are round about Thy throne.  
The gorgeous sunsets flame by Thy command.  
The tiniest flower and bird are from Thy hand.  
For Thy delight the swallows wheel and dip;  
The dew-drops sparkle on the pansy's lip.

Oh, God of moonlight, clouds and gentle rains,  
Purge Thou my heart 'til naught but love remains!  
Vouchsafe me sympathy; enlarge my soul  
That I, in Thy least works, may sense the whole;  
Open mine eyes and grant that I may see  
Thy hand in every creature formed by Thee.

G. B. L.



## Let's Talk About MY Garden Now

JUST about the time I was anxiously watching the growth of three hairs on the S. S. W. aspect of my upper lip, that beautiful ballad by one Alfred Tennyson, "Come into the Garden, Maude," was all the rage and I even sang it to long suffering relatives and house-guests myself. My ideas about gardens were somewhat vague and decidedly poetical—tho' with a practical side. I loved to see tall flowers swaying in the sunlight—OR moonlight. I was entranced by the scent of roses, mignonette and lavender: I liked to sever from the parent stem and convey to my mouth, strawberries, raspberries, peaches, apples and other succulent fruits and I was perfectly well aware that potatoes and other vulgar edible things had to be grown "somewhere out in the rear" of the premises.

Just how it was all done, *why* the roses blossomed and only flowers grew in the immaculate beds mattered very little to me. I had been told also that Man had his origin in the Garden of Eden and could (at that time) tell you just where it was situated. I am not so sure about the topography now. Eminently orthodox preceptors had taught me about the "fall" and the "curse," but I am afraid that when I was *very* young those who had to "sweat to eat bread" were, in my opinion, alone affected thereby. *My* bread came without perspiration and our gardens flourished, so why apply unpleasant things personally? I didn't. Later on, of course, I ceased to believe in Fairies, but never, never did my affection for gardens, generally, wane. As I will explain it is wobbling a little bit now, but may survive, if the "one and only" reciprocates sufficiently.

About the time that the three hairs aforementioned had increased to eight on both starboard and larboard sides of my nose, Fate shot me forth into cities. There, for the best part of my past life, I struggled to save others from their own foolishness—but never quite escaped my own! For "years and years and years" a window-box was the best I could do in the way of a "garden" and, later on, a piece of grass, alias "the front lawn," constituted this domain. It had to be cut and doing that, one perspired, all right: but not really enough to bring to mind the "original curse." You see, my particular bread still came from brain work and the brain, make it slave as you will, refuses to sweat.

Then, ultimately, came the opportunity to pursue the usual tenor of my way and still possess and *operate* a GARDEN. I had day-dreams and night visions about that garden. It was going to have everything in it that anyone else ever had—together with some things that were unique. I am firmly convinced at this moment that all this has, more or less, come true: I am at least positive that nowhere else in the world except MY garden, does the plebeian dandelion grow to a colossal height in twenty-four hours and I have a suspicion that *rumex crispus* (our dear old yellow-dock) forsook everyone else in this county and just naturally came and settled down where I would much rather see scallions and radishes.

You see, last year I bought a "real country home" (with city conveniences), set picturesquely down in the midst of about an acre of ground. When I saw it, it looked *Beau-ti-ful* and I, *en passant*, weighed around one hundred and sixty pounds. I weigh less now and MY Garden probably often looks more beau-ti-ful to others than it does to me. Still, galley slave tho' I may be, I hug my chains for I have bird-songs and flower-scents and green-sward (lots of it to keep green) and fruits and vegetables and air—oh n'everything! You know what I mean.

Now I'm going to tell you a whole lot of things that you may *not* know—or if you do, that you keep to yourself even as the Spartan boy kept his gnawing fox. The estimable people who had dwelt in the country home pending my arrival, were probably too busy golfing and "jazzing around" to get on really intimate terms with that near-acre. There were trees and shrubbery and (I found this out later—you see, I came into, or onto, the ground in late summer) hundreds of bulbs together with (except in front where the lawn was immaculate but a trifle lacking in chlorophyll) a choice assortment of indigenous plants which had flourished exceedingly. I found burdock bushes (I know *them*) so arboreal that I had to cut them down with an axe! Sunflowers as large as dessert plates stared at you from above serried ranks of nettles, mullein, cow-cabbage, skunk-cabbage, cuckoo-mint and crab-grass. I HAD the finest crab-grass in Illinois. Now I am *almost* bereft but tears refuse to come.

To make my garden look a little more like the thing of my fancy I hired a stal-

wart Pole: he put his family to work and they toilfully and very slowly tore up nearly everything which appeared above ground—beginning at the perennial beds. What they destroyed I don't know, but the weeds merely multiplied and waxed arrogant under their ministrations. However, I came along just as they were unearthing tulip bulbs and managed to save a bed which this spring produced about five hundred perfect flowers of the Darwin type (see Seed Catalogues). There may have been a dozen yellow Cottage tulips but the rest were pastel shades and perfectly formed. Right then, I knew in the depths of my soul, that I hadn't missed out altogether.

By late September I had mapped out the asparagus bed, picked some exquisite late roses and decided that IF the iris clumps and peonies were petted a little I would be very, very happy this spring. They *were* "petted," they responded nobly and out of days of toil I—and others—have reaped hours of undiluted joy.

But all these "set pieces" occupy a comparatively small space and there was an AWFUL lot of ground growing persistently just what one did want there. I have a horrid idea, moreover, that I imported a whole lot of exotic weeds in a patent pulverized sheep fertilizer I purchased, together with a formidable list of tools. We won't say anything about the variety of seeds which the whole family picked out during the long winter evenings when the radio was static-ing. We got 'em and, as soon as April really smiled, and the trees, shrubs, roses and other "fixed things" had been cut into shape by an "expert cutter-into-shape," he and I set out to plant where we would get the most perfect results. Then it snowed. Then it froze. Then it was torrid for a day or two.

About this time I found that the "expert," whom I had entrusted with half the seeds, couldn't read a syllable and had planted gloxinia where the onions were to go and, alyssum and nasturtium in alternate patches where I had planned a zinnia and cosmos parterre. The delphinium was next to the onions and four rows of Vaughn's romaine lettuce girdled my main circular front bed! At least that is how the seeds then seemed to repose, tho' the marking containers had been cruelly shuffled in the expert's pockets. He told me he had a "growing hand." Everything *he* planted, he said, "would come up." It did—after we waited a long time

to see if it was going to *grow*. As it refused to do that we made over the beds and reseeded with the result that now, if the weeds ultimately retreat under everlasting fire, we shall have verbenas where verbenas should be and squash where squash ought to grow. At this writing there are enough seeds up to plant out Lincoln Park. I am afraid we were two, too liberal sowers.

The beans gave me a shock. The expert planted them with misgivings: he murmured something about it not being safe to put them in till Decoration Day. Planted too soon, he assured me, they would "turn back on themselves and grow down." This was new to me, of course, so I watched them very carefully and, finally, one morning was confounded to see every bean shoved up above the ground! Examination revealed a very healthy looking sprout underneath, so, the expert being absent that day, I carefully and toilfully reversed each one and blissfully thought that intellect had again achieved a triumph over natural cussedness. Next day came the expert and he looked long and pop-eyed at the beans. Never, I gathered as I watched him with secret triumph, had he seen anything like *that*. Every bean was upside down! I had raked out my footmarks and no trace of the *faux pas* remained. I finally gathered that beans "come up that way" and thereupon silently sneaked off and began to uproot dandelions, which at least have their roots where one expects to find them. To this moment I think the expert believes those beans were sown "in the wrong quarter of the moon."

The next lot have reached the flowering stage—but now some worm is preying on them. Also upon my Ponderosa tomato plants; also upon my currant bushes; also upon my roses—really upon nearly everything but the weeds and the hollyhocks, which seeded themselves all over the gravel driveway. If I've cut out one hundred little hollyhocks, I've cut out ten thousand. And I see the plants listed at three for eighty-five cents. Were I commercially minded, I could be rich—but minus a driveway. I am sternly determined to limit my hollyhock display to twelve clumps. They take up room enough and don't please the eye very much till quite late. Then they become very untidy in their habits. Personally I should think three or four times before admitting this one of "the flowers our grandmothers loved" (*vide* Catalogues) beyond the utmost fringe of MY garden. Being here, I can only attempt to confine their propagative

tendencies. Nothing seems to eat the holly-hock.

I have dormant-sprayed and lime-and-sulphured and now am lavishly using Bordeaux Mixture. Next I'll try nicotine and if that and a few other toxic substances don't discourage the various pests that bore into, suck and chew every worthwhile growing thing, I'll take a desperate chance and gas the entire garden with cyanide fumes. Doing that, however, may destroy the industriously insectivorous hop-toads I've gathered—to say nothing of the birds which eat one insect and three cherries every two minutes.

Tho' some of my iris rhizomes seem to be mushy and smell disagreeable, gypsum dressings have enabled us to produce some glorious Dorotheas and Ambassadeurs. Moreover, the Peonies are peonying to meet one's fondest hopes and every dahlia root planted in its carefully prepared bed has grown till even now one wonders if dahlias of aristocratic "named sorts" were not once weeds like Dock, Burdock and Company? The books available (and most of them are) tell you to nip them down to a single stalk, so that one secures the ideal flower. It seems savage but it is going to be done. In MY garden I have had the tallest dandelions I ever saw and I'm going to have the dashingest dahlias. That is, if the dahlia worm or the botanist beetle or the epicurian epulis or something doesn't disarrange things.

By this time, as you may have guessed, I fully appreciate Adam and Eve's criminality. My knees are callous and my finger nails disreputable from fighting the thorns and thistles that the earth brings forth. I once thought I would like a large estate parked and landscaped to please the most fastidious eye. Now I am inclined to think that a very compact garden can keep a man so occupied that he can't "golluf" or fish or canoe or do anything much but weed, cultivate, thin-out, transplant, spray, water grass and crush green caterpillars firmly between the finger and thumb! There are several hundred other minor things he *should* do but sometimes doesn't but *always* he must pay the "expert" who has a "growing hand" and can spade more ground in an hour than you can in a week. If mine could *read* he'd be a wonder. Being part Indian and part Negroid he has various "miseries" which lay him up at inconvenient times, but I'm slowly getting these out of his system and by putting up crossed sticks or other definite signs in various parts of the place and drawing

similar designs upon packages of seeds, bulbs or plants, we manage to keep everything in its right place; with purslane, "pusly" as the expert calls it; and the inevitable sorrel, however, contesting for each and every inch of made ground.

Now do you see why I just HAD to tell you about MY garden. It's the sweetie of my youth come back with pristine charm undimmed—but with more darned parasites than anyone else's sweetie ever dared to possess—and finger-nails and temperament!

If you are the least bit interested I'll tell you, before the snow flies, just what developments and if you want to talk about *your* garden or the birds which nest in *your* bird houses, or the rocks which feature *your* rockery, please talk! You have the floor.

I've got to go out and look for night-crawling leaf-eating coleoptera *et al.* Ere departing, however, I would ask some horticultural enthusiast to tell me *why* is a picotee? And further *why* is the sweet pea so particular about its bed—not to mention the two cents per pea you have to pay the purveyor. I soaked some two-cent-per-pea peas and they drowned to death apparently. The picotees, however, came up and are going strong. Non-saturated sweet peas are following them closely. Even the peas seem to have gone "dry!"

QUERY. What is the legal (age) limit on seed? I received some beans so wrinkled and sere that I am sure they were harvested by one of the Pilgrim fathers. Further, a local store offers seeds they have had for several years "and they haven't spoiled *yet*."

QUERY. Why do dogs prefer to bury bones in one's Canna bed?

#### A TRIP WORTH TRYING

In a few lines I will try to give an outline of a vacation trip that will be of interest, give some good fishing and new ideas to those who are seeking them.

I will begin at Detroit, for the roads are better on the east side of Michigan I understand. Leave Detroit, to Pontiac, Flint, Saginaw, Bay City, then follow M 10 through Alpena, to Mackinaw. There take the ferry to St. Ignace in the Upper Peninsula.

From there run to The Soo; stop here to see the world-famed locks. From Detroit to Bay City is 100 miles and from there to Mackinaw another 275 miles over either paved or good gravel roads the whole distance. The ferry service will cost about



three dollars for a car the size of a Buick; smaller cars less. From St. Ignace to The Soo is 55 miles.

From here cross by ferry (60c toll, I think), to the Candian Soo. Here you take out a 30-day permit to tour in Canada and you *MUST* have your Auto License identification card with you for this procedure. There is no trouble and the Canadian officials are very gentlemanly and you are not held up over twenty minutes. Their price will be one dollar if you have a broker fill out the permit, or *nothing* if the officials do so themselves.

Then you have 515 miles of good road through a low-mountainous country, with gorges, falls, rapids, railways cut in the rock, passing through the beautiful Muskota country down to Toronto. You will find beautiful scenery all the way. Free camping sites at all the larger towns or good hotels at any place along the route. The speed limit in Canada is twenty-five miles per hour but they allow thirty miles per hour without holding you up.

If you will so plan your trip you can be in Toronto during the latter part of August and see the world-famous Canadian Exhibition. This alone would be worth the trip. You can find out the time of the latter by writing the Chamber of Commerce at Toronto. Cost of exhibition is twenty-five cents.

If you so desire you can take the boat (lake steamer) over to see Niagara Falls. This trip can be made in one day, going over in the morning and returning the same night. Niagara can be reached by auto also from Toronto but the boat ride is fine.

From here return to American soil either by Niagara Falls, Port Huron, or Detroit. Toronto to Detroit is 260 miles. Roads are good the whole distance unless you have to detour and you will get that wherever you go.

The whole 1,205 miles can be covered in 5 days if you want to travel 250 miles a day. My advice is to plan on 150 miles a day and enjoy the sights. I have made 250 miles a day on this trip but it is too fast. I have made the trip for fifty dollars by

camping at the camp sites and eating at hotels and restaurants. I did this driving a Buick. I mention this, because a small car would cost less and a larger car more.

If you care to fish in Michigan you can take out a nonresident license for all fish at a cost of five dollars; license to fish for all fish except trout, two dollars. These can be purchased along the route. Canada's fee I do not know at the present time.

I have stated only bare facts about this trip but will say that it is well worth taking. If you are a real, honest-to-goodness tourist it will appeal to you. At one place in the northern part of the state we started the machine from a dead stand-still by pushing with our hands and coasted exactly two miles without the motor running and sometimes we were traveling forty miles an hour.

M. E. BOVEE, M.D.,

Port Huron, Michigan.

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#### MASSIVE PHARMACEUTICALS

Child (in museum, pointing to some slabs of stone)—Mummie, what are these?

Mother—Those are Assyrian tablets, dear.

Child—What frightful headaches they must have had to swallow things that size.

—*Boston Transcript.*

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#### A ROSE BY ANY OTHER NAME

The flower show had been a great success, and a few evenings later Mr. Blank, who had performed the opening ceremony, was reading the local paper's report of it to his wife.

Presently he stopped reading, his justifiable pride turning to anger. Snatching up his stick, he rushed from the room. Amazed, his wife picked up the newspaper to ascertain the reason of her spouse's fury.

She read: "As Mr. Blank mounted the platform, all eyes were fixed on the large red 'nose' he displayed. Only years of patient cultivation could have produced an object of such brilliance. . . ."—*Pharmaceutical Advance.*

# Thumbnail Therapeutics

## POSTOPERATIVE CARE IN PERITONITIS

Giving plenty of fluids is important in the postoperative care of cases of peritonitis. From 2,000 to 3,000 cc. of saline solution should be given subcutaneously before the patient leaves the table; repeat in 12 hours and use the Murphy drip. Vomiting is controlled by early and repeated lavage. Splinting the abdomen with morphine, given until the patient is stuporous, is frequently helpful. Drug stimulation is of little value. Change the patient's position frequently. Do not remove drains until they are almost ready to float out by themselves. DR. FREDRICK C. WARNSHUIS, in *J. A. M. A.*

## ARTIFICIAL LEUCOCYTOSIS WITH NEOARSPHENAMNE

In many diseases—especially arthritis, asthma, bronchiectasis, pyelitis, eczema, iritis and hay-fever—improvement follows an increase in the leucocytes. This may be caused by injections of salicylate of mercury or, better, by intravenous injections of 0.3 to 0.6 Gram of neoarsphenamine.—FERGUSON and THOMAS, in the *Lancet*.

## TESTING FOR ALLERGY

Never make pollen tests or other tests for sensitiveness to foreign proteins without having *epinephrin* at hand, ready to inject at once in case a severe, general reaction should develop.

## EATING DURING PREGNANCY

A small meal, every 3 hours (5 times a day) meets the needs and conditions of a pregnant woman far better than three large meals at longer intervals. These meals should be alike in size and food value and should follow the 3-hour schedule closely, with no eating at bedtime.—DR. J. O. ARNOLD, in *Am. Physician*.

## PREVENTION OF COLDS AND BRONCHITIS

Ordinary colds and acute bronchitis almost always have a basis in digestive disturbances. If one regulates the diet carefully, using a maximum of fruits and vegetables and a minimum of meat, pastries and condiments; secures three bowel movements

a day; takes a cool bath every morning and a walk of at least three miles every day; and sleeps eight hours out of every 24 in a well-ventilated room, he will be practically "cold-proof."—DR. A. W. HERR, in *Am. Physician*.

## THE USE OF INSULIN

Only about one-third of all cases of diabetes seen in general practice need insulin, and these are the young, the undernourished, and those having surgical complications, acidosis or acute infections. Elderly and obese diabetics do not need insulin.—DR. FITZ, in *Bost. M. & S. J.*

## CHOLECYSTITIS

Ten grains of sodium succinate in a half cup of hot water every three hours will often relieve pain due to cholecystitis.—*Archives of Therapeutics*.

## POSTOPERATIVE TONSILLAR HEMORRHAGE

It is well, in all cases, to give 60 grains of calcium lactate the day before a tonsillectomy. If the blood coagulation time is unduly long add to the calcium salt a few doses of fibrogen, thromboplastin or the like and defer operation until the blood clots normally.—DR. J. C. TUCKER, in *Nebr. St. M. J.*

## SULPHARSPHENAMINE INTRAVENOUSLY

In cases of latent syphilis which are Wassermann-negative and symptom-free, it is well to give annual courses of mild treatment throughout life. For this treatment 1/6 to 1/4 grain of oxycyanate of mercury should be injected daily for several weeks and sulpharsphenamine, 0.4 to 0.6 Gram is given every fourth day, intravenously, with a Luer type syringe, dissolved in 30 cc. of distilled water. There are few or no reactions or nausea and no disagreeable after taste following sulpharsphenamine injections.—DR. M. F. LAUTMAN, in *Archiv. Derm. & Syph.*

## PEPTIC ULCER

Recognition of the primary, systemic, etiologic fault in peptic ulcer may be difficult. Foci of infection may exist in the oral ad-

enoid tissue, head sinuses, teeth, lymph glands, appendix, gall bladder, Fallopian tubes, ovaries, prostate or in ulcers or sub-infections of the bowels. All these which are present must be recognized and removed as a fundamental step towards the cure of many gastric ulcers.—DR. FRANK SMITHIES, of Chicago.

#### TEETHING

The following solution, rubbed on the child's gums, will give much relief from the discomfort incident to teething:

Anesthesin	3ss ( 2.00)
Phenol	gtt.iii ( 0.20)
Tr. Iodi	gtt.x ( 0.65)
Alcohol	f5vi (24.00)
Glycerin	q.s.adf5i (30.00)

#### HYPNOTICS IN PNEUMONIA

In pneumonia, sleep at night is all-important, and the best drug for assuring it is opium or morphine.—SIR WILLIAM HALE-WHITE, in the *Practitioner*.

#### TETANUS

Eleven cases of tetanus, most of them fatal, occurred in the United States during the past year, as a result of the use of bunion pads as vaccination dressings.—U. S. PUB. HEALTH SERVICE.

#### INSULIN BY BUCCAL ABSORPTION

Insulin is fairly readily absorbed by the mucous membranes of the mouth, the effect being  $\frac{1}{2}$  of that of an equal amount hypodermically. The maximum dose is 10 units, and is best given in a tablet to be dissolved in the mouth.—MENDEL, in *Klin. Wchnschr.*

#### ERGOT IN METEORISM

A useful formula in cases of meteorism is as follows:

R Ext. Nuc. Vom.	0.30
Ext. Ergot.	3.00
Cinchona q.s.	

M, et ft, pil. No. XXX

Sig.: one pill, 3 or 4 times a day, p.r.n.

Do not continue this prescription indefinitely as the prolonged administration of ergot is not without danger.—FIRGAN, in *Med. Klinik*.

#### TANNIC ACID IN BURNS

There seems to be something especially harmful in a superficial burn.

Cover the burned area with sterile gauze pads, held in place by sterile gauze bandages, and soak these dressings with a

freshly prepared, 2.5-percent aqueous solution of tannic acid. When the surface looks dry and brown remove the dressings and expose the wound to the air.

The general treatment should be as usual.—DR. EDWARD C. DAVIDSON, in *Surg. Gyn. & Obst.*

#### BREATHING IN PNEUMONIA

Pleurisy, operative wounds, heavy covers or anything whatever which interferes with the free movement of the chest in breathing exercises an unfavorable effect in cases of pneumonia.

#### NEURALGIA

An analgesic pigment containing 4 percent each of menthol and volatile oil of mustard in alcohol is frequently helpful in neuralgia.—DR. BERNARD FANTUS, of Chicago.

#### RADIUM IN SKIN CANCERS

In early cases of skin cancers 81 percent are cured by radium; moderately advanced cases, 38.4 percent; advanced cases, none.

Radium is the treatment of choice in cancer of the nose and eyelids, where operation would cause severe deformity. Anything but the most superficial lesions of the ear and dorsum of the hand should be excised.

Palliation and relief of pain are secured in some cases where a cure is hopeless.—DR. ERNEST M. DALAND, of Boston.

#### PSYCHIC FACTORS IN CHRONIC DISEASE

Patients with chronic diseases are frequently disabled, not so much by the disease itself, as by their *psychic reactions* to it. If, in such cases, you can get the patient to so adjust himself to the idea of his disease that it does not fill his whole mental horizon he will frequently be able to function adequately in his environment for many years.

—DR. A. L. JACOBY, of Detroit.

#### TURPENTINE INHALATIONS IN PNEUMONIA

In cases of pneumonia where the heart and respiration are seriously embarrassed, the lungs filled with mucus and the patient clammy and cyanotic, 1 ounce of not-too-highly-refined turpentine in 4 ounces of water, given as a vapor by means of a suitable steam inhaler, may sometimes be very helpful. Continue until expectoration is free and the heart stronger.—DR. H. F. BIGGAR, in *Amer. Phys.*

### SODIUM BROMIDE INJECTIONS IN SKIN DISEASES

Severe itching and irritation in eczema, urticaria, senile pruritus, etc., is frequently relieved by 3 or 4 intravenous injections of a 10-percent solution of sodium bromide in isotonic salt solution. The first injection is 5 cc and the others 10 cc.—DR. C. WOLFF, in *Derm. Woch.*

### MUSTARD PLASTERS IN BRONCHITIS AND PLEURISY

The sense of tightness in the chest in bronchitis and pleurisy may be relieved by a mustard plaster applied for 10 or 15 minutes every 6 or 8 hours.—DR. C. G. KERLEY, in *Practice of Pediatrics.*

### PSYCHOSES OF THE MENOPAUSE

In the mental depression immediately following the climacteric, orchitic extract sometimes relieves where ovarian extract fails. Later it is of no use and thyroid extract works much better.

In the psychic disturbances accompanying menstruation corpus luteum is very effective. It must be given daily for months.—DR. THOMAS B. SCOTT, in *Endocrine Therapeutics.*

### ARSPHENAMINE IN NEUROSYPHILIS

In order to get the best results with arspenamine in neurosyphilis, it is often necessary to give it twice or three times a week for many months. Until this has been done the drug has not been given a thorough trial.

Changes in the spinal fluid usually do not appear before three months, and it is frequently six months or a year before the change is marked and definite.—DR. SOLOMON, in *Bost. M. & S. J.*

### MAGNESIUM SULPHATE FOR INTRACRANIAL PRESSURE

In head injuries with symptoms of intracranial pressure, relief may often be obtained by dehydrating the patient with magnesium sulphate. The dose is 1½ ounces of the crystals, dissolved in 8 ounces of water, by mouth, or 3 ounces, dissolved in 6 ounces of water, by high colonic injection, every 4 hours until pulse and respiratory rates return to normal. More than 6 doses should not ordinarily be given.—DR. CARLYLE MORRIS, in *South. M. & S.*

### NEUTRAL ACRIFLAVINE IN GASTROENTEROLOGY

If it is desired to destroy all gram negative flora in the colon, irrigations with neutral acriflavine solution, 1 to 6,000, may be employed. This drug may be given by mouth in enteric coated pills. It is recovered in the feces and its action diminishes intestinal fermentation.—DR. G. R. SATTERLEE, of *New York.*

### TREAT THE WHOLE MAN

Every patient must be treated as a whole—the mind and the entire body. We cannot successfully treat any one organ by itself.—DR. THOMAS ORDWAY.

### CALCIUM LACTATE IN MIGRAINE

If 30 grains of calcium lactate be given at the first warning of an attack of migraine it will frequently abort or ameliorate the attack.—DR. C. E. RIGGS, in *Minn. Med.*

### TURGESCEENCE OF THE TURBINATES

A harmless method of treatment which frequently gives lasting relief from nasal obstruction due to swollen turbinates is to swab the affected parts with the following:

R Anesthesin gr.	xx (1.3)
Petrolat spiss.	3ii (8.0)
Sol. Epinephrin Min.	xx (1.3)
Petrolat. Liq.	3ii (8.0)

DR. DUNDAS-GRANT, in the *Practitioner.*

### HYPOGLYCEMIA AFTER INSULIN

Not uncommonly the injection of insulin causes the blood sugar to fall below the normal level, producing unpleasant or even dangerous symptoms. If the patient who is taking insulin will always have with him eight large lumps of sugar and will promptly eat them all if he feels "queer" after taking an injection, this danger can be avoided.—DR. EVE, in *Brit. M. J.*

### NOVASUROL IN ASCITES

In ascites due to cardiac decompensation, hepatic cirrhosis, carcinoma or tuberculosis, novasurol in doses of 0.5 to 3 cc. of a 10-percent solution, administered intramuscularly every 3 to 7 days, will sometimes (but not always) produce brilliant results, in the way of diuresis, when all other remedies have failed. The propriety of its use in renal dropsy is doubtful, due to the fact that it is a mercurial salt.—DRS. HARRY OERTING, of *St. Paul, Minn.*, and N. M. KEITH, of *Rochester, Minn.*

### FORCING FLUIDS

The Einhorn duodenal tube seems to be the most satisfactory method for introducing unusual quantities of fluid into the body. After the tube has been passed, tap water or Ringer's solution may be introduced, by the Murphy drip, at the rate of 40 to 50 drops per minute. One can thus introduce from 300 cc. of fluid, three times a day, up to 1500 cc., six times a day.—DR. CHARLES E. HAINES, in *M. J. & Rec.*

### BARBITAL IN NEPHRITIS AND PNEUMONIA

In patients with Bright's disease, diabetes, pneumonia and other acute infections the barbituric acid derivatives are eliminated slowly and their administration may be followed by partial or complete stupor which may cause the family and the physician serious uneasiness.—DR. H. A. HARE, in the *Therap. Gaz.*

### PAINTS AND LINIMENTS

The difference in the indication for paints (such as tincture of iodine) and liniments depends upon the indications or contraindications for massage. Counterirritant paints may be applied where rubbing with liniments might disseminate infection; or vulnerary balsams, like compound tincture of benzoin may be painted upon ulcerated areas where massage would be out of the question.—DR. BERNARD FANTUS, in *J. A. M. A.*

### PROPHYLAXIS OF IVY POISONING

One of the surest methods of prophylaxis after exposure to poison ivy is the use of soap and hot water. The Rhus poison requires a certain time to penetrate the skin, and if this can be prevented the eruption will not occur.—DR. RALPH O. CLOCK, of *Pearl River, N. Y.*

### CARBOHYDRATE FOODS

Carbohydrate foods leave the stomach quickly because they do not unite with the

acid gastric juice. If alkaline solutions are added to these foods their discharge from the stomach is markedly retarded.—DR. FRANK SMITHIES, of *Chicago.*

### SORE NIPPLES

The following prescription has given good results in a number of cases of sore nipples:

R Butesin	3ss ( 2.0)
Tr. Benzoin Comp	(15.0)
Glycerin	aaf3ss (15.0)

M. et sig. Apply to nipples as required.

### EPIDEMIC HICCUP

Epidemic hiccup has points of resemblance to lethargic encephalitis. The attacks are sometimes controlled by well-considered doses of morphine.—DR. L. F. BARKER, of *Baltimore.*

### FURUNCULOSIS AND BLOOD SUGAR

Most cases of chronic furunculosis show a high percentage of blood sugar, even though there be no sugar in the urine.

In such cases a successful treatment consists in instituting, as nearly as possible, a diabetic diet, and administering one drop of U-20 insulin for each 10 milligrams of blood sugar above 90 milligrams, fifteen minutes before the noonday meal.

The blood sugar should be tested at least every 10 days, fasting.

The carbohydrate intake should be permanently reduced, especially candy, ice cream sodas and suchlike.—DR. IRA B. BARTLE, in *Northwest Med.*

### PERINEAL GYMNASTICS FOR PROLAPSUS UTERI

The muscular effort which one makes to prevent a premature evacuation of the bowels brings the levator ani muscles into play. The frequent, voluntary repetition of this exercise greatly strengthens the floor of the pelvis, improving the circulation within the abdomen and greatly benefiting many cases of prolapsus uteri.—WILSON, in *Brit. M. J.*



# Current Medical Literature

## HYOSCINE-MORPHINE NARCOSIS IN LABOR

Theobald gives his experience with hyoscine-morphine narcosis in labor, in the *Practitioner* for December, 1925.

He plugs the patient's ears with cotton, kept in place by a flannel bandage which also covers the eyes. Unless delivery seems likely to take place quite promptly he gives  $\frac{1}{4}$  grain of morphine sulphate, with 1/150 grain of hyoscine hydrobromide. Two hours after the first dose he gives 1/225 grain of the hyoscine hydrobromide, and follows with 1/450 grain of the same drug every 2 or 3 hours, as the patient's condition seems to require. The morphine is not repeated.

The routine treatment should not be started until the os uteri is one-quarter dilated, which can be ascertained by rectal examination.

As this dosage is so much less than has formerly been recommended, constant supervision by the obstetrician is not necessary, providing he is *absolutely sure* that the case is normal. A nurse can give the small doses of hyoscine every 2 or 3 hours.

This method has caused no untoward symptoms in mother or child; in fact, the mother's convalescence seemed, if anything, to be hastened and the labor shortened.

The result of the treatment is almost always excellent; and if it should fail, in any case, no harm of any sort has been done.

## CLINICAL STUDY OF SULPHARSPHEN- AMINE

Cases occasionally arise in which arsenic must be administered, but where the intravenous route is impracticable or inadvisable. Sulpharsphenamine was worked out to meet conditions such as these, but the literature on this preparation is less elaborate and extensive than that dealing with the older members of this group.

Dr. James C. Fox, Jr., of New Haven, Conn., has carried out an elaborate series of clinical studies with this drug at the Yale University School of Medicine and the New Haven Hospital and reports his results in *Am. J. of Syph.* for July, 1925.

After presenting extensive tables and full details of his work he sums up as follows:

1.—Sulpharsphenamine was given intramuscularly or subcutaneously in doses as high as 0.6 Gram without causing a significant local reaction except in an occasional case, provided a solution of 33 percent concentration was used.

2.—The intramuscular or subcutaneous administration of the drug in patients in the secondary stage produced a slower healing effect on cutaneous and mucous lesions

than is usually obtained with the other arsphenamines given intravenously. However, the end-results, as judged by absence of clinical recurrence and effect on serology, compare favorably with those produced by the other arsenicals.

3.—No superiority was shown for the drug in the treatment of patients with neurosyphilis, either when administered in the first instance or when given to patients known to be resistant to the other forms of treatment.

4.—Evidence was not obtained that the drug possessed particular value in reversing the serology of the Wassermann-fast cases or in influencing favorably the clinical course of patients with disease of the cardiovascular system.

5.—The drug was found useful in treating three patients who had previously developed "shock" or "nitritoid" reactions after intravenous injections of the other arsphenamines.

6.—The route of administration seemed to play little or no part in determining the therapeutic effect but was found to be of considerable importance as far as systemic toxic reactions were concerned. In this connection intramuscular injection was found to be the method of choice.

7.—Dermatitis was found to have a relatively high incidence in our series of cases showing a total of 6 cases in 678 injections. It is important that three of these occurred among the 110 injections administered intravenously as compared with only one among 302 given intramuscularly.

8.—One patient, previously known to be intolerant to the other arsenicals, developed a severe grade of anemia of an aplastic type, but without purpura, following one course of seven subcutaneous treatments of 0.4 Gram each.

9.—Because of the high incidence of systemic reactions following the use of this drug, it seems desirable to confine its employment solely to those cases in which intravenous therapy cannot be used. Further study is especially indicated to determine the nature of this toxic factor in its composition and whether it can be eliminated. In the meantime sulpharsphenamine must occupy a restricted but nevertheless very useful place in the treatment of syphilis.

In the same journal Dr. Ethel C. Dunham, of New Haven, summarizes her studies of the use of this drug in cases of congenital syphilis by saying:

"Compared with neoarsphenamine, sulpharsphenamine seems to have the following advantages in the treatment of congenital syphilis: (1) It can be given subcutaneously with slight discomfort during the injection. Following the injection there is little pain or induration. Neoarsphenamine, on the other hand, cannot be given subcutaneously and, if given intramuscularly, in-

durated areas often result which may remain and cause discomfort for some time.

(2) Sulpharsphenamine can be given in larger doses and higher concentration than neoarsphenamine. (3) It clears up active lesions (condyloma and gumma) very rapidly but probably acts no more rapidly than neoarsphenamine. (4) As only two patients with syphilis of the central nervous system have been treated, no conclusions can be drawn as to its efficacy in the treatment of this type of the disease. (5) It does not seem to have any more effect than neoarsphenamine in changing the so-called "fixed Wassermann reaction." Possibly a change from neoarsphenamine to sulpharsphenamine may be advantageous. (6) It does not seem to cure early or late congenital syphilis any more rapidly than may be expected with neoarsphenamine. (7) There is probably no advantage in subcutaneous injections of sulpharsphenamine in older children or adults whose veins are accessible. The majority of the children actually prefer intravenous treatment. In fat children or small babies with inaccessible veins, the subcutaneous route has a great advantage. There are a certain number of parents who refuse to have their children treated intravenously and there is a great advantage in having an efficient drug that can be injected subcutaneously."

### CHRONIC CONSTIPATION

Chronic constipation is such a universal complaint that too many physicians get into the habit of prescribing some favorite combination of laxative drugs and letting it go at that.

Canick stated, a year or two ago, that 95 percent of all cases of constipation, not due to neoplasms or strictures, can be cured by proper treatment directed to the actual cause, which must be positively ascertained by means of all necessary clinical and laboratory studies.

In the *Therap. Gaz.* for October, 1925, Dr. Meyer Golob, of New York, pleads for the objective diagnosis of cases of chronic constipation, by means of roentgenograms made after giving enemas of barium suspension, sufficiently copious to fill the entire colon.

He shows a number of pictures and relates cases of constipation due to spasticity of the colon, angulations resulting from adhesions, redundancy of various parts of the bowel, weakening of the pelvic floor from an old perineal tear, and a number of other abnormal conditions.

In summing up, the doctor concludes that:

1.—A diagnosis cannot be based on a history alone, because it is often misleading; nor on clinical and physical studies, because they are not sufficiently informative.

2.—Roentgenography offers a method of precision for determining the presence, amount, type, and orientation of the stasis.

3.—A diagnosis of chronic constipation cannot be made as such; both the type and location must be known before treatment can be given.

4.—The treatment must vary to accord with the location—an enema may relieve stasis in the rectum, but not in the pelvic colon—and with the type; a cellulose-free diet is indicated by the spastic type; a cellulose-plus diet by the atonic type.

5.—The x-ray is often the only means for ascertaining whether the dyspepsia is a reflex of a much more serious underlying malady, the presence of which is otherwise concealed.

6.—Roentgenography applied to the diagnosis of constipation may obviate surgery.

### SODIUM SALICYLATE INTRAVENOUSLY IN PNEUMONIA

The authorities of the Missouri Pacific Hospital at Little Rock, Ark., after using intravenous injections of sodium salicylate, with intramuscular injections of caffeine sodium benzoate, in the treatment of several cases of pneumonia, feel that, in comparison with other methods of treatment, this has certain advantages. Cough and pain seem to be markedly and promptly reduced and the general condition of the patient is decidedly better.

Their technic, as reported in the *J. Arkansas M. S.* for April, 1926, is as follows:

The first dose of sodium salicylate was  $7\frac{1}{2}$  grains and subsequent doses of 15 grains were given every 6 hours until fever, pain and cough were distinctly diminished. Intramuscular injections of  $7\frac{1}{2}$  grains of caffeine sodium benzoate were given for stimulation, and digitalis was added when indicated. General methods of treatment should never be neglected.

The only disadvantage of this method is that these drugs both produce a noticeable degree of pain at the time of injection. Great care should be taken that the sodium salicylate does not escape from the vein and infiltrate the tissues.

### THE TREATMENT OF RENAL DISEASE

Dr. Hobart Amory Hare, of Jefferson Medical College, Philadelphia, feels that if we would all take a course of instruction in pathology from time to time it might diminish our injudicious therapeutic enthusiasm.

In the *Therap. Gaz.* for February, 1926, he shows how diuretics, when given without a clear understanding of the actual condition of the kidneys in the particular case, may do far more harm than good.

Before giving any of the saline diuretics we should ascertain, by making an estimation of the urinary chlorides, that our patient is able to excrete salts; otherwise the drugs we give may be retained in the system and give rise to a dropsy for which the physician and not the disease is to blame.

The kidneys need periods of rest, the same as any other organs, and to give stimulant diuretics, such as squill, or to force water, in a case where the kidney is swollen from inflammation and its glomeruli

and tubules are packed full of dead epithelium and other debris is the height of folly.

If the excretory power of the kidney is diminished, only sufficient water should be given to keep up elimination by the bowels, skin and lungs, and the intake of water should be measured and recorded as accurately and carefully as the output of urine.

In cases of chronic parenchymatous nephritis, where the kidney is swollen and the tubules filled with degenerated cellular elements, the administration of moderate doses of sodium iodide frequently does good. This drug should not, however, be given if the inability to excrete salts is marked.

#### DETERMINING THE CURE OF GONORRHEA IN THE MALE

It is undoubtedly true that many men suffering from a latent gonorrheal infection marry and infect their wives, though the number of such cases is steadily decreasing. As a corollary of this decrease, it is highly probable that a larger and larger number of young men are refraining from marriage because they have suffered from an attack of gonorrhea and their physicians are unable or unwilling to assure them that the disease is entirely cured so that they may safely marry.

are in condition to marry. These men must be told that it is possible to give a definite answer to this question, but that it will require weeks or months to make the necessary study.

Granted that the preliminary examination shows a few shreds in the first glass; a slightly enlarged and sensitive prostate, containing many leucocytes but no bacteria, Dr. Young proceeds according to the following schedule: (See table.)

No case should be pronounced cured until at least two vaccine injections have been given and a large sound passed at least once. It is better to follow the complete schedule.

If there is any residual or latent gonorrheal infection it will usually declare itself before the vaccine injections are reached, and has always done so prior to the passage of the sounds. If the man has no gonorrhea the sounds can do him no harm. By means of this schedule all severe reactions and relapses are avoided.

Dr. Young feels that a physician who will refuse a man permission to marry because he has a few shreds in his urine or a few leucocytes in his prostatic secretion, without taking steps to determine, positively and definitely, whether or not his infection is cured, is doing his patient a grave injustice.

If a residual infection is lighted up by these tests it must be treated by the physi-

Visit	Day	Treatment
1	1	Examination of prostatic secretion, etc.; irrigation
2	2	Instill Lunosol 50 percent
3	3	Massage and irrigation
4	4	Instill pure Lunosol or 0.5 percent protargol
5	6	Massage; instill 1 percent protargol
6	9	Massage; instill silver nitrate; 1/480
7	12	Massage; instill silver nitrate; 2/480
8	16	Massage; instill silver nitrate; 3/480
9	19	Massage; instill silver nitrate; 1 percent
10	22	Massage; 1/480, combined gonorrheal vaccine 0.125 cc.
11	26	Massage; 1/480, combined gonorrheal vaccine 0.25 cc.
12	29	Massage; 1/480, combined gonorrheal vaccine 0.5 cc.
13	33	Massage; 1/480, combined gonorrheal vaccine 1 cc.
14	36	Sound 26 F.; 1/480
15	40	Massage 1/480; vaccine 1 cc.
16	43	Sound 27 F.; 1/480
17	47	Massage 1/480; vaccine 1 cc.
18	50	Sound 28 F.; 1/480
19	54	Massage 1/480; vaccine 1 cc.
20	57	Dilate 30 F.; irrigation Silvol; 0.5 percent.

The methods for determining a cure which have been tentatively advocated, from time to time, by means of injecting strong solutions of silver nitrate, passing large steel sounds, or recommending that the patient indulge in an alcoholic or sexual debauch, are entirely indefensible and unnecessary.

Dr. H. McClure Young, of St. Louis, Mo., in the *J. of Urol.* for March, 1926, sets up what appears to be a rational and satisfactory method for determining whether a man is actually cured of his gonorrhea.

He refers to the fact that many young men will go to a doctor and expect him to determine, in a few minutes, whether they

are in condition to marry. These men must be told that it is possible to give a definite answer to this question, but that it will require weeks or months to make the necessary study.

#### SUGAR AS AN ENERGY FOOD

In an editorial in the *Therap. Gaz.* for April 15, 1926, attention is called to the recent work which has demonstrated that sugar is a source of readily available energy for the performance of all kinds of work.

Examination of the blood of Marathon runners at the end of a race, showed that all of them suffered from hypoglycemia,

and that the more severe the distress they showed the more marked was the deficiency of sugar in the blood.

The practice of feeding the contestants on a diet rich in carbohydrates for several days prior to the race, and giving the sugar to eat while running, resulted in the men finishing this grueling ordeal in much better condition.

Starving a patient for 12 or 24 hours before a surgical operation sends him into the fight ill prepared to stand the shock. Of course, there should be no food in the stomach when the anesthetic is given, but we should see to it, when possible, that the liver is well stored with glycogen by giving a diet rich in readily assimilable carbohydrates for some days before operation.

These facts give an interesting suggestion to physicians and others who find it difficult to eat an adequate meal in the middle of the day, and perhaps account for the immense increase in the consumption of sweet drinks since alcohol has become less readily available.

#### TREATMENT OF PARONYCHIA

In the *Bost. M. & S. J.* for Nov. 5, 1925, Dr. Coues declares that the treatment of paronychia by means of wet dressings (which rarely stay wet and frequently dam up the secretions and make conditions worse) and lateral incision of the finger rarely or never produce satisfactory results.

The treatment he recommends consists in gently elevating the cuticle of the nail with a fine, sterile probe or the blunt end of a large surgical needle and carefully exploring until pus is located. A very fine, narrow ribbon of sterile rubber tissue is then placed in the pocket thus formed; sterile petrolatum is smeared over the end of the finger, and over this is placed a square of rubber tissue with a small hole in the center. Moist gauze and a short finger splint are then applied and the patient is instructed to drip warm salt solution on the outer dressing every hour or two.

In favorable cases the finger will be found soft and free from inflammation at the next dressing, and repetition of the treatment for 2 or 3 days will result in a cure without the necessity for removing the infected nail.

#### REMOVABLE RADON SEEDS IN CARCINOMA OF THE TONGUE

In an article in *Ann. of Surg.* for May, 1926, Dr. Joseph Muir describes a new technic of radium therapy in lingual carcinoma which offers a practical means of irradiating even the most inaccessible tongue lesions. This is accomplished by the implantation of removable platinum radon seeds. As the methods of treatment heretofore used have always proved unsatisfactory, this article is of especial importance from a clinical standpoint.

The various methods by which lingual carcinoma has previously been treated are

discussed and their advantages and drawbacks considered. Imbedding of bare tubes according to Janeway's method affords an even distribution of radiation, but causes necrosis which is invariably followed by sloughing and may even induce unavoidable fatal hemorrhage. If screened seeds are used, necrosis is avoided, but they are objectionable because they must remain in the tongue as foreign bodies. The platinum needles advocated by Regaud also obviate necrosis and can be removed when radiation has been accomplished, but proper distribution of these applicators is very difficult; they cause too much trauma; and above all, they are hard to immobilize and cannot be placed upon the posterior dorsal surface of the tongue.

The method offered in this article obviates all these difficulties, while retaining every desirable feature. The seeds are completely screened with platinum, thus doing away with necrosis and sloughing; they are easily withdrawn after adequate dosage has been delivered, so that they do not remain in the tissue as foreign bodies. These seeds can be placed in any position required, just as readily in the hitherto inaccessible "root" of the tongue, as in more favorable positions. The article is profusely illustrated, demonstrating the exact method of approach to these inaccessible lesions.

The growth is first carefully palpated, and the number of seeds required determined according to its depth and surface extent. When a seed has been placed in the desired position, the attached thread is left protruding from the point of entry, where it is cut off so as to leave just enough to be readily grasped with forceps at the time of removal.

The entire treatment causes no pain, and but slight inconvenience to the patient; and when skillfully performed under proper aseptic precautions, the technic offers an excellent means of solving one of the most vexing of clinical problems.

J. M.

#### MILK INJECTIONS IN INFECTIONS

In the *New Orleans M. & S. J.* for March, 1926, Dr. George Gellhorn, of St. Louis, has published an interesting and thoughtful article on the use of milk injections in pelvic infections in women.

He discusses the mechanism of nonspecific protein therapy in general and of milk in particular, and then takes up its specific applications in gynecology.

Dr. Gellhorn begins with from 3 to 5 cc. of sterile, fat-free milk (either prepared in the laboratory or put up in ampules under various trade names), and increases the dose to 10 cc. by the third injection, repeating every 2 to 5 days, according to the condition of the patient and the degree of leucocytosis. He uses a long, thin, sharp needle and makes the injection slowly.

The doctor considers cardiac decompensation, diabetes and alcoholism as absolute contraindications to the use of milk injections; and recommends caution in their use in cases of pregnancy, quiescent pulmonary



tuberculosis, protein hypersensitiveness, epilepsy and conditions of nervous instability. It will not bring the dead to life and should not be given to an utterly exhausted patient.

Gellhorn is decidedly enthusiastic about the treatment, and sums up his findings and ideas as follows:

1.—Nonspecific therapy of inflammatory diseases consists of the subcutaneous, intravenous or intramuscular injection of protein substances which are in no wise related to the causative bacteria.

2.—Protein substances, thus introduced "parenterally," have the faculty of activating the protoplasm of all cells in the body and, particularly, of those cells which are engaged in warfare against the invading microbes.

3.—This plasma activation serves to mobilize the natural defensive powers of the organism and to overcome the infection.

4.—Of the various protein substances recommended, milk is most easily available and at the same time highly efficacious.

5.—In the field of gynecology, gonorrheal infection of the tubes and Bartholin's glands is most often amenable to protein therapy; in other locations of the infection the therapeutic results is less conspicuous.

6.—Nongonorrheal inflammations of the genital tract are also often cured by this treatment.

7.—In the realm of obstetrics, puerperal infections, even of severe degree, frequently yield to nonspecific therapy with surprising rapidity.

### BOROCAINE

A new drug, or series of drugs, produced by combining cocaine or other well-known local anesthetics with boric acid instead of the mineral acids, has been introduced in England, and in the *Lancet* for January 2, 1926, Dr. E. Watson-Williams discusses it with some particularity, describing the animal experiments used to determine its toxicity and effectiveness.

These experiments have shown that borocaine is much less toxic than cocaine and slightly less so, considering its efficiency, than is novocaine (procaine), the efficiency-toxicity index being: procaine 0.7; borocaine 1.0.

Concerning the other properties of "Borocaine E" the author states:

"Borocaine, like cocaine hydrochloride, can be boiled for a short time without damage; prolonged boiling causes decomposition. A 2-percent solution was prepared in the same manner as cocaine solution and left in its stoppered bottle; at the end of four days it had begun to turn brown, and was quite a definite brown color by the end of ten days. The properties, physical and therapeutic, of this solution were not the same as those of fresh solution, and it appears definite that some decomposition had occurred. The stability in aqueous solution, therefore, seems poor.

"All the timed observations reported above were made after the addition of adrenalin

(epinephrin) 1:10,000. With this, though shrinkage was good, the mucosa was often not well blanched; it is suggested that perhaps the adrenalin had penetrated more rapidly, and so acted on tissues not reached by the borocaine. The onlookers remarked the redness of the mucosa and the definite tendency to bleeding. In five cases, after operation, the nose 'fairly poured' mucus tinged with blood. A trivial smarting was observed on application of the 20-percent solutions; no case of late irritation was seen, nor was any evidence of toxicity observed. In three cases 5-percent borocaine without adrenalin (epinephrin) caused definite congestion in the nose. This drug does not appear likely to be very useful for nasal work. It is only fair to state that the proprietors, though claiming 'borocaine entirely supersedes cocaine,' recommend it for the eye, throat, and urethra, but make no claim that it is suitable for nasal work."

### DENTAL CARIES AND CONSTIPATION

Decayed teeth and constipation are so universal that most laymen and, unfortunately, not a few physicians have come to regard them as uncomfortable but necessary concomitants of living in this generation.

An editorial in the *M. J. and Rec.* for May, 1925, calls attention to the fact that these conditions are not diseases by *symptoms* of some underlying pathological state. This basic lack of resistance is due, in all probability, to the absorption of products of incomplete or perverted metabolism or to faulty diet or both.

In any case it behooves physicians to study their patients carefully and to attempt the correction of the factors predisposing to caries, constipation and possibly cancer.

### BIRTH CONTROL

Although Dr. S. Adolphus Knopf, of New York, is best known as a phthisiologist, his work has put him in a position to appreciate the disastrous effects of repeated and uncontrolled pregnancies, on the lives of both mothers and children, and he has eloquently and convincingly set forth his plea for the dissemination of contraceptive information in an address before the Medical Association of Greater New York City, which is published in the *M. J. and Rec.* for January 6, 1926.

Dr. Knopf feels that the lack of such information as this prevents many excellent young people from marrying by the fear that they will become surrounded by a family larger than they will be able to rear satisfactorily. This inability to marry at the proper physiological period frequently leads to sexual repressions, followed by neuropsychoses; or to promiscuous sexual indulgence, often attended by venereal infections.

He quotes Peterson and Haines to the effect that one-third of all pregnancies in this country (about 100,000 every year) end in abortions, a large number of which are



criminally induced. They estimate that 6,000 women die annually from this cause. Would it be better if these unwanted pregnancies were prevented?

In Holland, where the dissemination of information regarding birth control is openly encouraged, the health of the people at large, as shown by the general death rate, has improved faster than in any other country in the world, and the physical quality of the people has shown a corresponding improvement.

The *Christian Century* has called attention to the fact that birth control is now widely practiced by the most intelligent classes of the population, while only the ignorant and less desirable classes still procreate at random. The welfare of society demands that all classes be placed in possession of the same information, so that this control may be fairly equal in all strata of society.

Those ultrareligionists who claim that contraception is a violation of the laws of nature, which are the laws of God, should, if they are consistent, do away with lightning rods, vaccination against smallpox and other diseases, irrigation, all horticultural experimentation, all surgical operations—and even give up their spectacles and their false teeth. It is this ability to direct and control the forces of nature which chiefly distinguishes man from the lower animals.

Finally, he calls attention to the anxiety neuroses arising in many families, due to lack of knowledge of how to prevent undesired pregnancies and to the marital infidelity and broken homes which frequently result from ill-considered attempts to accomplish this result by means of unphysiologic sexual abstinence or by abnormal practices. He urges physicians to use their influence for the repeal of the unwise laws which now hamper them in the exercise of one of their most important and beneficent functions.

#### BISMUTH IN THE TREATMENT OF SYPHILIS

Dr. C. H. Marshall, of Memphis, Tenn., states, in the *Memphis M. J.*, for May, 1925, that he feels that very early syphilis can be cured and he uses chiefly arsphenamine, which has proved most efficacious. At the Memphis General Hospital clinic all are interested in bismuth as an agent to be used in Wassermann-fast cases, consequently seven months ago they began to give bismuth to patients in whom arsphenamine and mercury had not produced a negative Wassermann nor relieved the symptoms.

The injections are given at weekly intervals. The treatments should be given at shorter intervals, but the great number of patients to care for in their department and the limited facilities for handling makes this impossible. The dose has been 0.1 Gram of potassium bismuth tartrate throughout, except seventy-five doses of metallic bismuth.

Only one patient has shown symptoms from the drug. She developed a blue line on the gums and a foul breath. At the time the blue line developed she was receiving metallic bismuth. Instead of stopping the treatment she was put on potassium bismuth tartrate and the line gradually disappeared. None of the other reported reactions to bismuth have been observed in our patients.

From the facts that 41.1 percent of Wassermann-fast cases have become negative, while 18 percent have shown a reduction in the Wassermann test after a small amount of the drug, and that, after several treatments, the patients have felt improved generally, they believe that bismuth offers another much-needed means of attack on syphilis.

#### "FOODLESS" FOODS

Slenderizing at the expense of health and vigor is less common than a year ago, but the beauty columns are still filled with bad advice, and hospitals for neurotics overfilled with women who dieted themselves into a chronic state of nerves and malnutrition. Fortunately, the funny bone of most people is close to the surface and of late it has often been hit by clever digs at the foolish fashion which has popularized famine.

A writer in a recent number of *Collier's Weekly* told how he sat through a six course "foodless" dinner, and then under the urge of either malice or subtle humor he wrote down the processes by which his dinner had been prepared.

He ate beets and spinach which had been boiled in three waters until there was nothing left of them but "filler," and bran wafers made from bran deprived of its nutriment by putting it in a cloth bag tied over the end of a hot water faucet and kneading until nothing remained but the cellulose, and shaped into form with a mucilage made of India gum. The salad dressings were made from mineral oil mixed with vinegar and paprika. The dessert was agar agar sweetened with saccharin. After such a dinner we may reasonably suppose that he filled the gasoline tank of his car with water and drove home to stoke his furnace with ashes.

BAKING TECHNOLOGY.

# New Books

## SAJOUS: RELIGION AND SCIENCE

**STRENGTH OF RELIGION AS SHOWN BY SCIENCE; Facilitating Also Harmony Within, and Unity Among, Various Faiths.** By Charles E. deM. Sajous, M.D., Sc.D., LL.D. Illustrated. Philadelphia: F. A. Davis Company, 1914-16 Cherry Street. 1926. Price \$2.50.

There is a strong tendency, especially among physicians and other people of scientific training, to rather scoff at and belittle religion because they feel that its teachings conflict with those of science, and if such a conflict is present they have no choice which they will believe—their daily work forces the scientific viewpoint upon them.

As a matter of fact, there is no such conflict. The most modern scientific discoveries are throwing more and more light upon the reality and accuracy of the teachings of religion, when these latter are properly understood.

Dr. Sajous' eminence in the field of scientific study and research is recognized the world over, and needs no comment whatever, and the fact that he has thought fit to spend some of his busy and valuable months in preparing such a book as this is, in itself, a strong argument in favor of the vitality and practicality of religion as a factor in human life.

In this interesting, inspiring and thought-provoking volume, this great leader in the world of science has shown that the teachings of Darwin—and especially all the balderdash regarding that teaching which was brought out by the Scopes trial—were founded upon a mistaken idea of how species develop, as has been demonstrated by Haeckel, Weissmann and others. Such being the case, the idea that man has developed, physically, from the apes—the crux of the whole squabble in Tennessee—falls to the ground of its own weight and a sounder argument replaces it.

Dr. Sajous feels that the underlying cause of the flood of juvenile delinquency and crime which is now horrifying us all is a weakening of the validity and grip of fundamental religious subjects on the minds and lives of many of the younger generation. Nor is this surprising when we consider in what a ludicrous or repellent light many people now see the great religious teachings, because of the ignorance and narrow-mindedness of many preachers and teachers.

The doctor shows how errors in the translation of the ancient Hebrew writings, and still worse errors in their interpretation, have led to the most puerile ideas in regard to their force and meaning, and corrects many of these errors, thus making understanding possible.

He shows that evolution, or growth and development, is the basic law of all the man-

ifestations of Divine Energy, and develops the thesis that the *ether of space* is the medium for the dynamic functioning of God's life in the universe.

The many ways in which orthodox science aids and confirms the teachings of the best-informed leaders of all great religious and Christian sects are clearly and logically set forth.

The suggested remedy for the rising tide of lawlessness and crime is the cultivation of the faculty known as *conscience*, which, the author believes, is the direct voice of God, speaking to a man through that fragment of the Divine Life which we call the Ego, or the Human Soul.

Here is a book which anyone, no matter how busy he may be, who has reason to doubt the stupendous wisdom of Him who directs the age-long procession of the planets and the coloring on the lip of a violet can read with the greatest pleasure and profit.

No one man can or should direct or coerce the thinking of any other man along these lines. He may suggest and instruct; but every man must arrive at *Knowledge* for himself. This book should assist many to establish themselves, firmly and sanely, in the midst of the torrential sweep of the events of this present generation.

## GREENE: DIAGNOSIS

**MEDICAL DIAGNOSIS FOR THE STUDENT AND PRACTITIONER.** By Charles Lyman Greene, M.D. Sixth Edition Revised and Enlarged; With 14 Colored Plates, and 709 Other Illustrations. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. 1925

This is a complete textbook covering the whole field of diagnosis by physical and laboratory methods, and its popularity is attested by the fact that the present edition is the sixth.

All new clinical and laboratory signs and tests seem to be included, and the author has strongly emphasized the importance of physical examinations and the unsatisfactoriness of machine-made diagnosis, based upon laboratory findings alone.

The illustrations are many and excellent, but especial commendation is due the splendid selection of roentgenograms, especially those illustrating abnormal heart conditions. These are not only well chosen but well reproduced, so that they add materially to the value of the text.

Another feature of interest is a large series of tracings with the polygraph and the electrocardiograph, which, with their explanations, enable one to make intelligent readings of such records.

The paper is of fine quality and the type is clear and readable. The binding might be a bit more substantial on a volume so bulky as this.

Bold-face subheads and italics are freely used in the text; and a feature of especial value is the profuse marginal notes, in bold-face type, which appear on every page, so that one need never be at a loss as to what he will find in the various paragraphs.

The index is exceptionally complete, occupying 160 pages, double column, with many headings in capitals and bold-face type, making the book very easy to refer to.

To those who have no modern text on diagnosis this volume is unhesitatingly recommended as one which covers the field in an accurate and thorough manner. One can do no better.

Even those who already have such a textbook will find many admirable features in this which will warrant its purchase.

### CABOT: THE HEART

**FACTS ON THE HEART.** By Richard C. Cabot, M.D., Professor of Medicine and of Social Ethics at Harvard University. Illustrated. Philadelphia and London: W. B. Saunders Company. 1926. Price, \$7.50.

Dr. Cabot is well known to the profession through his excellent book on physical diagnosis and his numerous contributions to periodical literature.

In this volume he has reversed the usual process of clinical study and has started in the dead-house with about 2,000 cases which showed definite pathological conditions in the heart and traced these cases backward to the clinical records to find what signs and symptoms were present which should have called attention to the lesions which were present. Thus the book differs from all others on the subject by dealing only with cases which came to autopsy.

The author expressly states that this is not a book to be read straight through, but believes that something will be gained by reading the first chapter—dealing with diagnostic procedures and methods of study—and the last—in which he sums up his results. We agree with him.

One point which he emphasizes is that most "heart disease" is imaginary; that is, the patient who comes complaining of his heart rarely has any disease of that organ.

The volume contains 780 pages and is well made and printed on good paper. Half-tones, diagrams and charts are used wherever needed.

Every cardiologist should have a copy of this book, and any physician who has the time and inclination to make a careful study of underlying pathological changes and the symptoms accompanying them will gain much valuable information from its perusal.

### BERKELEY: ENDOCRINE MEDICINE

**THE PRINCIPLES AND PRACTICE OF ENDOCRINE MEDICINE.** By William Nathaniel Berkeley, Ph.D., M.D. Illustrated with 56 Engravings and 4 Colored Plates. Philadelphia and New York: Lea & Febinger. 1926. Price, \$4.50.

Most of the periodical literature regarding the endocrines emanates, today, from

the laboratory workers, who, with all their zeal for chemical facts, are, to a large extent, uninterested in and unfamiliar with the clinical applications of glandular extracts in practical medicine.

Another type of literature is that which, though it may actually be sound and reliable, is open to a certain degree of suspicion because it is prepared by men who are more or less directly concerned in the commercial preparation of glandular products.

Dr. Berkeley's book stands clear of both of these shadows, because it is the work of an unbiased observer who is working from the clinical standpoint and is trying to show the practitioner how he can use these products in his everyday work. Much attention is paid to symptoms, diagnosis and treatment, and the discussion of fine-spun theories and highly controversial points is avoided.

There are chapters on the endocrine glands in general, the autonomic nervous system and basal metabolism. The various ductless glands are then dealt with, one by one, in full detail. After this comes a discussion of the relations of these glands to each other, with notes on pluriglandular diseases and the influence of the endocrines on growth and senescence.

It is a slightly book, well printed and well bound, and is of moderate size (350 pages).

This subject is one of large and rapidly growing importance to every physician, and this volume presents the established facts upon the matter in a clear and workmanlike manner. It is to be recommended to every physician for complete and careful reading and study.

### ODENEAL: MEDICAL TREATMENT OF MOUTH, THROAT, NOSE, EYE AND EAR

**NON-SURGICAL TREATMENT OF DISEASES OF THE MOUTH, THROAT, NOSE, EAR, AND EYE.** By Thomas H. Odeneal, M.D. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. 1926. Price, \$4.00.

The otolaryngologists, rhinologists and stomatologists are prone to claim exclusive jurisdiction over the various orifices in the head, and tend to feel that the only or at least chief method for attacking abnormal conditions in these orifices is the surgical method.

On this basis most of the books dealing with diseases of the eye, ear, nose, throat and mouth are written from the standpoint of the specialist, and concern themselves largely with highly refined surgical technic. Such books are valuable but are rather dry and unprofitable reading for the general practitioner who has not the time to perfect himself in such technic and who knows that his patients expect him to do something for them.

Dr. Odeneal has written a book for practitioners, telling them what they can do for the relief and cure of extracranial diseases of the head, when to call in the head surgeon, and how to take care of the case after he has done his work.

The various organs heretofore enumerated are taken up, part by part, and considered in detail but with commendable brevity. All needless verbiage and discussion are avoided and attention devoted to *what is the matter and what to do about it.*

Part two of the work deals with vaccines and serums; the vegetative nervous system; the endocrine glands; reactions, signs and symptoms; focal infection; headaches and neuralgias; encephalitis lethargica; the use of tinted lenses; etc.

The book is neat and of convenient size. The type and paper are good, and bold-face subheads facilitate quick reference. The index appears to be adequate.

In looking over this volume one wonders why something of this sort has not been adequately done before now. Certainly every general practitioner should add this to his library at once, as a reference book and one to be thoroughly studied as fast as time will permit. It will add to his professional efficiency and prestige and thus to his financial solvency.

Medical students will find it vastly helpful, and so will young specialists in the various head diseases.

One of the most useful and practical books which has appeared for some time.

#### SAUER: NURSERY GUIDE

**NURSERY GUIDE FOR MOTHERS AND CHILDREN'S NURSES.** By Louis W. Sauer, Ph.D., M.D. Second Edition. St. Louis: The C. V. Mosby Company. 1926. Price, \$2.00.

Young mothers frequently ask their physicians to recommend a book which will give them the information they ought to have regarding the care and management of their babies. Here is the very book you have been looking for.

The material is grouped in seven chapters: the care and general development; the nursing infant; the premature infant; artificial feeding; nutritional disturbances of the artificially fed infant; some common ailments; and care of the sick infant. An appendix contains height-weight tables, suggested reading for the young mother and blanks for recording interesting data. The index is adequate.

The book is written in a simple and pleasing style which the average mother will have no difficulty in understanding; but it is also dignified and scientific in tone. The statements made are in full accord with the most modern pediatric thought and practice.

The book is well made and printed from clear type on high-grade, coated paper. The margins are wide and bold-face marginal subheads facilitate quick reference. There are 17 illustrations and 5 charts.

This is one of the best books of its kind that we have seen and should serve a useful purpose. It would make an acceptable present for any young mother.

#### HERRICK: INSECTS

**INSECTS INJURIOUS TO THE HOUSEHOLD AND ANNOYING TO MAN.** By Glenn W. Herrick. Revised Edition. New York: The

Macmillan Company. 1926. Price, \$3.00.

A knowledge of the habits of insects which carry disease, those which are injurious to the household and annoying to man should be of help to practitioners. This book is recommended for their libraries. It would serve also as a text in the study of economic entomology. The numerous references to literature make it especially valuable as a guide in the study of insects.

Few technical terms are used. The author has written the book, he says, "for the householder and for those who desire information regarding household pests and practical methods of controlling them."

The author discusses only the more important insects—many of which each of us has encountered. No attempt is made to make this text all-inclusive and it is the more interesting and instructive for that reason.

The following subjects are taken up in detail: flies, especially the house fly; mosquitoes; the bedbug; cockroaches; fleas; ants; insects injurious to clothes and foods; some human parasites; annoying pests to man; troublesome invaders of the household; wood-boring insects; poisonous insects; and the uses of gases and heat against insects.

Large, plain type and good quality paper make the book pleasant to read. It has 152 illustrations, eight plates, and 468 pages of text.

F. J. H.

#### WOOD: CHARACTER BUILDING

**CHARACTER BUILDING, A PRACTICAL COURSE.** By Ernest Wood. Chicago: The Theosophical Press, 826 Oakdale Ave. 1924. Price, \$1.25.

We all know that if a man wants to have a strong and robust body he can build it that way by taking the proper kind of exercises at the proper time and in the proper way.

We also know that if a man is going to build a house he makes his plans and arranges his materials in an orderly manner; begins by laying the foundations; builds up the walls; and finally puts on the roof. He then embellishes the structure with a porch and makes it lovely by planting a garden around about.

For some unexplainable reason we seem to feel that a man who has a strong and pleasing character has just happened to be gifted in that manner and is to be envied rather than emulated.

The author of this interesting and extremely valuable little volume proceeds upon the assumption that a satisfactory character is something which may be acquired by anyone who is willing to make the necessary intelligent effort and lays down the rules with the same definiteness and certainty that a trainer would outline a series of exercises for a man who was going into an athletic meet, or as an architect would give instructions to one who was going to build a house.

He states that the foundation of a character is courage; the walls are built of truth; and that the roof, which covers it



all and protects the inmates, is love. Having built the house, square and true, there should be a pleasing porch or vestibule of charming and gracious manners and a joyous garden of recreation and play.

Not content with wise generalities, Wood goes on to give definite instructions for doing all the things he recommends. At the end of each chapter is a series of exercises designed for the purpose of developing the qualities upon which he has been dwelling, with instructions as to how, when and how long these exercises should be carried on.

In the chapter on the three fundamental virtues he shows that courage, truth and love have not been assigned to their position haphazard but because they are actually fundamental; and in dealing with the fundamental vices he demonstrates that they are the opposites of the three virtues: laziness, thoughtlessness and selfishness.

In a series of wonderfully interesting chapters he describes the seven basic types of character which it is possible for different men to develop, so that, by careful study, one may select the particular type of exercises which are best suited to his individual needs.

It is our mature and considered opinion that this is one of the most practical and valuable books we have seen in a long time and that any man who will seriously study and practice the ideas here set forth will reap a harvest of solid and enduring happiness which can scarcely be calculated.

#### WATSON: HANDBOOK FOR NURSES

A HANDBOOK FOR NURSES AND MIDWIVES. By J. K. Watson, M.D. (Edin.), Capt., R.A.M.C. London and New York: Humphrey Milford, Oxford University Press. 1926. Price, \$4.00.

Covers the whole field of medicine and surgery, taking up those matters which would be of the greatest interest and practical value to nurses.

If this is a fair example of what English nurses are supposed to know and do, it appears that they take greater responsibilities than they usually assume in this country.

A large amount of information is here included in a volume of convenient size. The book should be of great value not only to nurses but also to medical students; and it might prove a valuable compend of general information for many practitioners.

#### SNOWMAN: EMERGENCIES

MANUAL OF EMERGENCIES; Medical, Surgical and Obstetric; Their Pathology, Diagnosis and Treatment. (Based upon Lenzmann's "Emergencies in Medical Practice.") By J. Snowman, M.D., M.R.C.P. Lond. Second Edition. New York: William Wood & Co. 1926. Price, \$4.00.

Under the pressure of an emergency threatening life we do not always think as clearly and rationally as we might, and many of us welcome assistance. It is such assistance that this little book is intended to give.

The general headings are: Emergencies of the Respiratory System; of the Heart; of the Gastrointestinal Tract; of the Urinary Organs; in Midwifery; and Poisoning.

The book contains a large amount of material. The type is rather small but readable, and bold-face subheads and italics are freely used to facilitate reference. The paper is so thin that, although the volume contains 360 pages, it is of convenient size for the pocket or handbag. The index is ample and the binding of waterproof fabricoid.

The only possible fault to find with the book is that the thinness of its pages makes them somewhat difficult to handle, and permits the printing on the reverse side to show through to some extent.

This is a very useful and valuable manual for any and every physician and we cordially recommend it to all of our readers as being a sound and profitable investment.

#### ELWYN: NEPHRITIS

NEPHRITIS. By Herman Elwyn, M.D., Assistant Visiting Physician, Gouverneur Hospital, New York, N. Y. New York: Macmillan Company. 1926. Price, \$5.00.

Beginning with an extensive description of the anatomy and physiology of the kidney, the author proceeds to a detailed study of the various pathological changes which affect that organ, with a sincere attempt to correlate clinical manifestations with the structural and functional changes which underlie them.

Renal insufficiency, uremia and hypertension are considered, and considerable attention is given to the kidney of pregnancy, which the author believes to be, essentially, a diffuse glomerulo-nephritis.

This book is a detailed and thoughtful study of the diseases affecting an organ which seems to be succumbing to the shocks of our present strenuous mode of life and is recommended to all who have the time and inclination to go fully into these interesting and very vital and fundamental matters.

The suggestions regarding treatment given at the end of each chapter give the book decided practical value, in addition to its undoubted worth as a contribution to the study of clinical pathology.

#### CHAMBERLAIN: CHEMISTRY IN AGRICULTURE

CHEMISTRY IN AGRICULTURE. Edited by Joseph S. Chamberlain; 384 pages. New York, The Chemical Foundation, Inc. 1926. Price, \$1.00.

Many readers will recall the two previous books under the title, Chemistry in Industry, by which The Chemical Foundation in its educational work has brought out the dependency of practically every phase of modern life upon the science of chemistry.

This volume, whose chapters have been written by sixteen authorities in their special fields, has all the merits of its predecessors. It supplies, in a very readable manner, the specialized information which is so often desired, but so difficult to obtain by ordinary reading or contacts. While the book is pri-



marily on agriculture, each chapter has a vital appeal to everyone, as illustrated by chapters in such subjects as diet, vitamins, meat in nutrition, cereals, milk and its products, and others equally important.

The book maintains the high standard set by its predecessors, and is well worth reading by the physician. Not the least of the virtues of the volume is the price, which is only one dollar, postpaid. It is excellently bound in cloth, and well illustrated.

E. H. V.

#### TAYLOR: HISTORY BLANKS

**PRELIMINARY CLINICAL HISTORY BLANKS.**  
*Designed by J. Madison Taylor, A.B., M.D., Philadelphia, F. A. Davis Company, 1914-16 Cherry Street. Price, 50 Blanks, \$1.00.*

These Blanks, which are mentioned editorially in this number, would be of immense assistance to any and every physician in the study of cases of chronic disease.

#### BACH AND WHEELER: CHRONIC DISEASE

**CHRONIC DISEASE; A Working Hypothesis.** By E. Bach, M.B., B.S., D.P.H., and C. E. Wheeler, M.D., B.S., B.Sc. New York: Paul B. Hoeber, Inc., 67-69 East 59th Street. 1925. Price, \$3.00.

The authors state as their hypothesis of the etiology of chronic disease that it is due to the luxuriant growth in the colon—due to our abnormal (?) diet—of organisms which grow freely in an alkaline medium and give rise to putrefactive processes. They feel that many complaints, and possibly even cancer, are due to the absorption of toxic substances from a colon laden with the products of putrefactive bacteria.

The remedy proposed consists in replacing the ordinary diet, partially or wholly, with one consisting of raw nuts, cereals, fruits and vegetables, and administering vaccines made from gram-negative non-lactose-fermenting organisms from the patient's stools.

A decidedly interesting book, but probably far from the last word on the subject and of secondary importance.

#### KLEINBERG: SCOLIOSIS

**SCOLIOSIS: Rotary Lateral Curvature of the Spine.** By Samuel Kleinberg, M.D., F.A.C.S. New York: Paul B. Hoeber, Inc. 1926. Price, \$6.00.

The deformed person, unless he be an individual of very exceptional mental caliber, is likely to make little or no headway in business or society, and to be shunned by many thoughtless persons, so that his life is frequently unhappy and embittered by reason of physical malformation. To be able to restore these sufferers to a condition of reasonable normality is to open the door, for them, to a larger and more useful and beautiful life.

Scoliosis is one of the most frequent conditions which makes what we call "cripples," and if this condition is discovered early—during childhood—its progress may be arrested, so that the deformity resulting from

its severer degrees will be wholly avoided.

In this volume the author has dealt fully with the anatomy and physiology, classification and pathology, etiology, clinical course, and treatment of scoliosis.

The book is printed on excellent paper, from large, clear type, with many helpful diagrams and half-tone pictures, and is well bound.

No orthopedist can afford to be without this work, and it would be helpful to practitioners by enabling them to recognize scoliotic cases early and set about their treatment, or to refer such patients to specialists who will be able to deal adequately with the situation.

#### MEDICAL CLINICS OF NORTH AMERICA

The appearance of these interesting and valuable volumes is awaited with interest by all who subscribe for them.

The September and November numbers, for 1925, are devoted to various New York clinics and contain much material of general interest and value.

In the September number are the clinics by Cecil and Hansson, of Bellevue Hospital, on Physical Therapy in Chronic Arthritis; by A. C. Holland, of the New York Hospital, on Gastrointestinal Neuroses; by Dana W. Atchley, of the Presbyterian Hospital, on the Treatment of Chronic Nephritis; by A. L. Barach, of the Presbyterian Hospital, on the Use of Oxygen in Acute Respiratory Disturbances; by A. F. Kraetzer, of Bellevue Hospital, on the Nervous, Run-down Patient; and a number of others.

The November number contains a clinic by R. L. Levy, of the Presbyterian Hospital, on Quinidine; one by A. B. Cannon, of Columbia University, on Ringworm; one by J. M. Marcus, of Mount Sinai Hospital, on Syphilis of the Stomach, and another on Cardiospasm; and ten other useful studies.

The volume for January, 1926, is the Tulane University number and contains a long list of clinics by the very able men of New Orleans, dealing, to a considerable extent, with problems of tropical medicine.

Dr. C. C. Bass, of Tulane University, discusses Malaria, Pellagra, Hookworm and Amebic Dysentery; John H. Musser, Charity Hospital, Sprue and Pernicious Anemia; F. M. Johns, Tulane University, recommends Stovarsol (Acetarsone) in the treatment of Amebic Dysentery; and J. Holmes Smith is pleased with the effects of Bismuth in treating visceral syphilis. There is much more valuable material.

The volume for March, 1926, deals with Chicago Clinics, and the articles by Dr. Walter W. Hamburger, of Michael Reese Hospital on coronary disease, angina pectoris and "acute indigestion"; by Drs. Isaac A. Abt and A. A. Strauss, reporting a study of 221 operative cases of congenital pyloric stenosis; by Dr. Walter S. Priest on hyperthyroidism simulating heart disease; and by Dr. James G. Carr, of Cook County Hospital, on digitalis delirium, uremia and

milk sensitiveness are among the most interesting.

The May, 1926, volume goes on with the Chicago clinics, including among twelve articles, one by Dr. Lewis J. Pollock, on neurological diagnosis; one by Dr. Ralph C. Hamill, on disability, damages or disease; and one by Dr. Harold A. Bachmann, on the prevention of heart disease in children.

For the man who is far removed from the great medical centers these books and those like them are almost indispensable; and they are good and valuable reading for any physician.

The Medical Clinics of North America are issued serially, one number every other month. Per Clinic year (July to May), Paper \$12.00; cloth \$16.00 net. Philadelphia: W. B. Saunders Company.

### INTERNATIONAL CLINICS

**INTERNATIONAL CLINICS.** *A Quarterly of Illustrated Clinical Lectures and Especially Prepared Original Articles by Leading Members of the Medical Profession Throughout the World. Volume I. Thirty-sixth Series.* 1926. Philadelphia and London: J. B. Lippincott Company. Price \$3.00 per volume; \$12.00 per year.

This series of volumes of clinical lectures and original articles, by prominent men of this and other countries is well known to most of our readers.

The present volume (March, 1926) contains departments on Diagnosis and Treatment, Electrotherapeutics and Physiotherapy, Medicine, Surgery and Medical Progress in 1925.

While some of the articles are of direct, practical value and application, the greater number are rather technical and seem better suited to the needs of the research worker and the student than they are to those of the practicing clinician. Most busy practitioners will find little of immediate value, though, of course, such studies will do them good if they have time for it.

### STONE: BLOOD CHEMISTRY

**BLOOD CHEMISTRY COLORIMETRIC METHODS;** For the General Practitioner; With Clinical Comments and Dietary Suggestions *By Willard J. Stone, B.Sc., M.D. Introduction by George Dock, M.D. Second Edition, Revised.* New York: Paul B. Hoeber, Inc. 1926. Price, \$3.25.

This, the second edition of an important book, should be available for reference to every internist and physician. With a growing appreciation of the importance of diagnostic methods, particularly as applied to blood chemistry studies, the interpretation of these diagnostic findings is assuming increasing importance.

*Blood Chemistry* supplies the information needed for preparing the blood samples, making the standard solutions needed, and making the various determinations desired—nonprotein nitrogen, urea nitrogen, uric acid, preformed creatinin, total creatinin,

sugar, chlorides, cholesterol, as well as total nitrogen and titratable acidity of the urine, and phenolsulphonephthalein determination.

An important feature of the book is the section on clinical comments, at the end of each chapter; these comments set forth the significance, limitations, and diagnostic meaning of the tests described.

There are also chapters on the diagnosis of impaired kidney function, dietary control of disturbances of metabolism, and diet in the treatment of diabetes mellitus.

E. H. V.

### BREUER: PHYSIOTHERAPY TECHNIC

**INDEX OF PHYSIOTHERAPEUTIC TECHNIC.** *By Miles J. Breuer, M.A., M.D., F.A.C.P. Omaha, Nebr.: American College of Radiology and Physiotherapy. 1925.*

A handbook for the man who is trained in the application of physical methods to the treatment of disease; not for the beginner, because there is no study nor discussion of methods and results.

This is an index of various pathological conditions, with a more or less annotated list of the different physiotherapeutic modalities which may be applicable to various cases under differing conditions. The diseases are arranged alphabetically and printed in large type for ready reference. There are a good many photographs and diagrams illustrating points in technic.

In general the suggestions made are sound and rational. We feel that there is danger in the advice that, in ectopic pregnancy, the fetus should be killed by electric shock and left to be absorbed. It is difficult to diagnose extra uterine pregnancy unless it ruptures, and then the treatment is always surgical.

A valuable reference book or compend for those who are using physiotherapy in their practice.

### JOHNSON: A LONG MEDICAL LIFE

**SIXTY YEARS IN MEDICAL HARNESS OR THE STORY OF A LONG MEDICAL LIFE, 1865-1925.** *By Charles Beneulyn Johnson, M.D. New York: Medical Life Press. 1926. Price, \$3.00.*

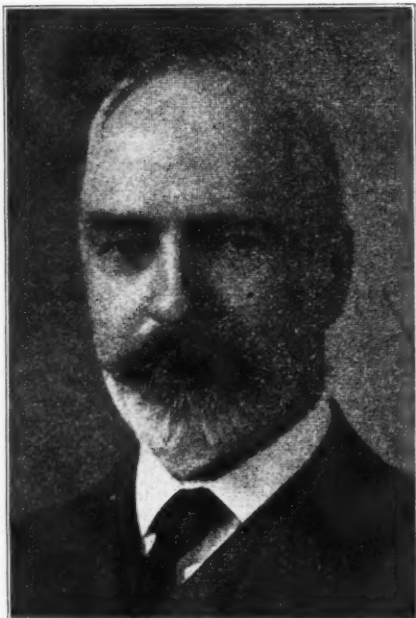
Here is a book for the doctor's leisure hour, wherein he will find recreation and also much of use and value, for a man cannot practice medicine for sixty years without acquiring a large measure of practical wisdom.

The period covered by this book embraces the last third of the nineteenth century and the first quarter of the twentieth, during which time a complete revolution took place in medical thought and practice.

The older readers will find a stirring of recollections of their own early experiences, and the younger ones will here find a picture of the conditions under which their fathers and grandfathers practiced medicine and will wonder how they achieved such worthy results with such a meager equipment of facts and apparatus.

# Medical News

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PROF. ARTHUR R. CUSHNY, M.A., M.D.

The medical profession, and particularly the world of scientific medical research, lost one of its most illustrious and valuable members by the death, on February 25, 1926, of Dr Arthur R. Cushny, professor of materia medica and pharmacology in the University of Edinburgh Scotland.

Dr. Cushny was born in 1866 and was educated at Aberdeen University, where he took the degrees of M.A. and M.D.

In 1892 he was appointed assistant to the professor of pharmacology in the University of Strassburg, Germany. In 1893 he became professor of pharmacology at the University of Michigan, where he did much to vitalize that subject for those who were so fortunate as to be his pupils.

He remained at Ann Arbor until 1905, when he was appointed to a similar position in the University of London, England, and later (in 1918) in the University of Edinburgh.

He was one of the foremost investigators of this generation into the action of drugs

upon the normal and diseased animal and human body, and his textbook upon the subject is recognized all over the world as a standard authority.

In all his laboratory work he never lost sight of the fact that the chief reason for his labors was the helping of sick and suffering humanity. For this reason he always had the clinical bearings of his researches in the front of his mind, and he often worked in close collaboration with some of the most prominent internists in Great Britain, notably, Sir James Mackenzie.

The loss of a man like this, who was just in the midst of an active and exceptionally useful life, was a great blow to medical science in general and to the medical school of Edinburgh in particular, and is felt as a personal loss by those of us who knew, respected and loved him.

G. B. L.

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## DR. CHARLES STUART MOODY

A few days ago I learned of the death, on April 22, of Dr. Charles S. Moody, of Rigby, Idaho.

Doctor Moody is an old friend of CLINICAL MEDICINE, to which he has contributed frequently for many years. He wrote on all kinds of subjects—on medicine, military life, nature study, sportsmanship, Indian lore and the early history of the great northwest, and particularly of Idaho.

The Doctor was a wonderful man—a man of splendid ideas and remarkable intellectual attainments; a man who knew the west as few men can know it, and whose devotion to true sportsmanship and knowledge of nature and outdoor life put him in a class almost by himself. He had a wonderful mind. There was something about his literary style that rang true every time. When I read the letters and articles prepared for CLINICAL MEDICINE, I used to look upon them as a true picture of the man himself, for there was nothing labored or artificial about anything he wrote.

I shall never forget the very short visit I made to his home some years ago, and the fishing trip I took with him and some of his friends up Lightning Creek. I think I was about as tired that night as I have

ever been, but nevertheless I enjoyed the day as I have enjoyed very few in my life.

Doctor Moody was born in Randolph County, Missouri, in 1870, and as a boy moved with his parents to Oregon. In 1881 the family moved to Idaho, locating near Troy. In the early days of the state he was engaged in the newspaper business and also conducted a drugstore. In 1900 he was graduated from Central Medical College, St. Joseph, Mo., afterward returning to Idaho and locating at Orofino.

Doctor Moody has occupied many positions of importance in Idaho. He has been a member of the state legislature, president of the state medical society, mayor of Sandpoint, and Adjutant General under former Governor Moses Alexander during the trying period of the World War. Throughout his life he has been interested in state and military organizations.

He is survived by his wife, and by one son, Virgil C. Moody, of Grangeville, Idaho.

ALFRED S. BURDICK, M.D.



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#### CARRYING ON FIGHT AGAINST TUBERCULOUS CATTLE

J. A. Kiernan, of the Bureau of Animal Husbandry in the United States Department of Agriculture, has developed what is known as the "area plan" in combating tuberculosis in cattle. Under the plan, which consists of inspecting every animal in a given area

instead of going only where herds are known to be tuberculous, the tuberculosis rate has already been cut in half. Dr. Kiernan predicts that it will be almost wiped out by 1936.

#### MEDAL TO DR. DUNNING

The Remington Honor Medal, awarded each year by the New York branch of the American Pharmaceutical Association to the pharmacist who has rendered the most outstanding service to American pharmacy, was presented to Dr. H. A. B. Dunning on May 12 at a banquet attended by representatives of all the national societies connected with chemical and pharmaceutical research and industry. Dr. Dunning has made notable contribution to the knowledge of chemistry and pharmacy and has recently directed a movement to raise \$1,000,000 for a national headquarters to serve as a pharmaceutical clearing-house for the whole country.

#### PHYSICAL THERAPY THESIS

The American College of Physical Therapy announces a Prize Contest, subject to the following rules and conditions:

**Eligibility.**—This contest is open to Licensed Clinicians, Physicists, and Fourth and Fifth Year Medical Students from recognized Medical Schools.

**Subjects.**—The subject must be on some branch of physical therapeutics embracing Galvanism, Diathermy, Radiant Heat-Light, Ultraviolet Light, X-rays, Radium, Hydrotherapy, Exercise.

**Scope.**—The paper must be limited to 2,000 words or less and must involve some problem of research, laboratory or clinical, pertaining to closely allied or actually on physical therapeutics. A short abstract of 200 words or less should accompany all papers which are to be typewritten on one side of paper only and double spaced.

**Time.**—All Theses must be submitted to the Chairman of Thesis Committee, Dr. D. Kobak, 30 North Michigan Ave., Chicago, not later than August 15, 1926.

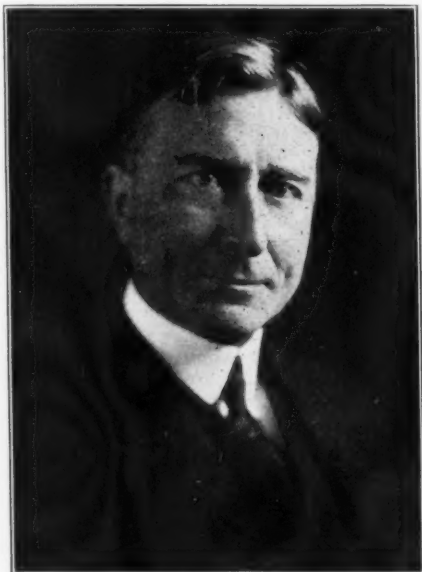
**Judges.**—The judges will be selected from the faculties of several medical schools, and will be men who are connected with the College.

**Prizes.**—There will be six prizes (physical therapy equipment) the total value of which will exceed \$2,500.00.

Announcement of winners will be made at the Clinical Congress to be held at the

Drake Hotel, Chicago, October 18 to 23, 1926. The winning papers will become the property of The College and will be published in its official journal.

with toxin-antitoxin have kept 1260 persons alive today who would have died last year under the conditions then obtaining.



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#### SECRETARY-GENERAL OF LEAGUE OF RED CROSS SOCIETIES

Dr. Rene Sand of Paris, France, Secretary-General of the League of Red Cross Societies, was recently in Washington attending sessions of the Pan-American Red Cross Congress.

#### FOOT-PRINTING BABIES

The markings on the sole of the foot are as individual as those on the finger tips.

Several hospitals are making foot-prints of all newborn babies so that they can never be mixed up. Sounds like a fine idea.

#### DIPHTHERIA PREVENTION

Chicago has the lowest death rate from diphtheria (8 per 100,000 population) of any city in the country having more than 1,000,000 population.

Instruction of the people as to the need of proper diet, fresh air, plenty of sleep and sunshine (or cod-liver oil); prompt use of antitoxin; and prophylactic vaccination



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#### PRESIDENT OF CANADIAN RED CROSS

Dr. James W. Robertson, of Ottawa, Canada, President of the Canadian Red Cross, who was recently in Washington attending sessions of the Pan-American Red Cross Conference.

#### CIVIL SERVICE EXAMINATIONS

##### Junior Medical Officer (Interne)

Applications for appointment as junior medical officer will be rated as received until August 31. The examination is to fill vacancies in Veterans' Bureau Hospitals and Diagnostic Centres and in positions requiring similar qualifications.

Salary, \$1,860 to \$3,300 a Year.

The duties, under immediate supervision, are to admit patients, take histories, make physical and mental examinations and record findings; to make ward rounds of inspection, note charts, record observations; to prescribe for minor ailments or for acute or emergency cases and to dispense medicine in emergency; to perform minor surgical



operations and to assist at major operations and in redressing; to administer anesthetics, to make routine laboratory tests and analyses; to assist at out-patient clinics in dressing and administering vaccines; to keep records, make up case histories, answer correspondence relating to patients and compile statistics requiring medical training.

#### **Dietitian**

Applications for dietitian will be rated as received until December 30. The examination is to fill vacancies under the Public Health Service and the Veterans' Bureau throughout the United States.

Salary, \$1,800 to \$2,700 a Year.

The duties are to purchase the food supplies for all messes operated in the hospital; to plan all menus, both for patients on ordinary diets and diets with reference to special diseases; and to supervise the preparation and serving of all dietaries in the hospital, both to patients and personnel.

Competitors will not be required to report for examination at any place, but will be rated on their education, training, and experience.

Full information and application blanks may be obtained from the United States Civil Service Commission, Washington, D. C., or the secretary of the board of United States civil-service examiners at the post office or customhouse in any city.

#### **Senior Medical Technician (Pathology)**

Applications for senior medical technician (pathology) must be on file at Washington, D. C., not later than July 13. The examination is to fill a vacancy in the Surgeon General's Office, War Department, Washington, D. C., and vacancies occurring in positions requiring similar qualifications.

Salary, \$1,860 to \$2,400 a Year.

The duties, under direction, are to dissect prepare, describe, and classify histological and pathological specimens and arrange such materials for sectioning, study, and display; to do research work in technical methods; and to perform related duties as assigned, including assisting in autopsies.

#### **INTERNATIONAL CONGRESS ON SEXOLOGY**

The first International Congress on Sexology will be held in Berlin, Germany, October 11 to 15, 1926.

Prominent sexologists from all over the world, including such men as Sigmund Freud, of Vienna; Jadasshon, of Breslau; C. B. Davenport, of New York; Bertrand Russell, of London, and Lawadowsky, of Moscow, will take part in the discussions, which will cover every field having relation to the sex life—biology, hygiene, medicine, law, economics, sociology, etc. Birth control, eugenics, pedagogics and other allied topics will be discussed.

For information regarding the Congress, address Dr. Moll, Berlin W., Germany, Kurfürstendamm 45.

#### **AMERICAN ELECTROTHERAPEUTIC ASSOCIATION**

The thirty-sixth annual meeting of the American Electrotherapeutic Association will be held at the Hotel Ambassador, Atlantic City, N. J., September 8 to 11, inclusive.

On September 7, a clinical session will be held at the Polyclinic Hospital, Philadelphia.

An excellent program has been prepared for this meeting.

For information address Dr. Richard Kovacs, 223 East 68th St., New York City.

#### **CENTRAL TRI-STATE MEDICAL SOCIETY**

The Central Tri-State Medical Society, which was recently organized and comprises the states of Ohio, Kentucky and West Virginia, met at Huntington, West Va., on May 6, 1926, with an attendance of over 500. The program was excellent, the speakers being men of national reputation. The secretary is Dr. F. O. Marple, 420 Eleventh St., Huntington, West. Va.

#### **ANESTHETISTS TO MEET**

The annual meeting of the Mid-Western Association of Anesthetists will be held October 11-14, 1926, in Kansas City, Mo., at the same time as the Clinic Week there. Headquarters, Baltimore Hotel.

An interesting and attractive program is in the process of making. Any physician or dentist desiring to read a paper should send the title of this paper to the secretary very soon. Ralph M. Waters M.D., Sec.-Treas., 425 Argyle Bldg., Kansas City, Mo.

# Send for This Literature

To assist doctors in obtaining current literature published by manufacturers of equipment, pharmaceuticals, physicians' supplies, foods, etc., CLINICAL MEDICINE will gladly forward requests for such catalogues, booklets, reprints, etc., as are listed from month to month in this department. Some of the material now available in printed form is shown below, each piece being given a key number. For convenience in ordering, our readers may use these numbers and simply send requests to this magazine. Our aim is to recommend only current literature which meets the standards of this paper as to reliability and adaptability for physicians' use.

Both the literature listed below and the service are free. In addition to this, we will gladly furnish such other information as you may desire regarding additional equipment or medical supplies. Make use of this department.

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|-------|--|-------|--|
| E- 30 | Helping the Cell to Help Itself<br>Alkalol Co.   | E-428 | V-E-M. Schoonmaker Laboratories,<br>Inc.   |
| E- 84 | Storm Binder and Abdominal Sup-<br>porter. Katherine L. Storm, M.D.  | E-433 | Home Treatment of Tuberculosis.<br>32-page reprint of articles by Dr.<br>Beverly Robinson and others. Charles<br>Killgore. |
| E- 91 | The Colden Way. 8-page booklet.<br>Century National Chemical Co.   | E-434 | Safe Sedation. 12-page booklet. John<br>B. Daniel.   |
| E-111 | Dial. Nervous Insomnia and Its<br>Medical Treatment by Dr. M.<br>Lesieur and Dr. A. Peuret. 6-page<br>booklet. Ciba Company. | E-435 | A Sanitarium Vacation. 24-page<br>booklet. The Ralph Sanitarium.   |
| E-134 | Chinosol—Non-Poisonous Antiseptic.<br>32-page booklet. Parmele Pharma-<br>cal Co.  | E-439 | Naftalan. 10-page booklet. Ft.<br>Dearborn Drug & Chemical Co.   |
| E-140 | Modified Milk Combined with Milk<br>of Magnesia. Sharp & Dohme.  | E-473 | The Calcreose Detail Man. 14-page<br>booklet. The Maltbie Chemical Co.   |
| E-194 | Ninth Edition of the Electro-Surgi-<br>cal Instrument Co. Catalog. 80-<br>pages.   | E-489 | Blood Pressure. Its measurements,<br>Interpretation and Management. 18-<br>page booklet. Battle & Co.                      |
| E-222 | Rabies Vaccine. Parke, Davis & Co.   | E-536 | Foot Weakness and Correction for<br>the Physician. 48-page booklet. The<br>Scholl Mfg. Co.                                 |
| E-224 | Dependable Pharmaceutical Prod-<br>ucts. 208-page price list. Zemmer<br>Company.   | E-556 | Erythrol Tetranitrate Merck. Merck<br>& Co.  |
| E-236 | The Glycerophosphates. 8 - p a g e<br>folder. Smith, Kline & French Co.  | E-568 | Dietary Sources of Calcium and<br>Phosphorus. E. L. Patch Co.  |
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| E-287 | The Intravenous Treatment of Ma-<br>laria. By B. S. Wyatt, M.D. Intra-<br>venous Products Co. of America.                    | E-586 | Plants Which Cause Hay Fever. 36-<br>page booklet. The Arlington Chemi-<br>cal Co.   |
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